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Convention Resolutions

Full text of the Resolutions presented at the Jacksonville Convention and the actions thereon will be reported in the July issue of This Journal.

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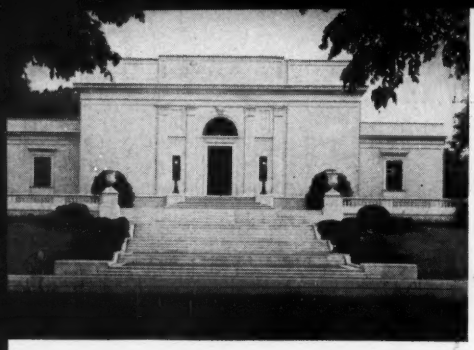


STRAIGHT FROM HEADQUARTERS

By *ROBERT P. FISCHELIS*, Secretary
AMERICAN PHARMACEUTICAL ASSOCIATION

The Class of 1949

MOST of our colleges of pharmacy will graduate classes this month. The AMERICAN PHARMACEUTICAL ASSOCIATION extends a most cordial welcome to the young men and women who have completed their pharmacy course in the 70-odd colleges of pharmacy scattered over the United States. Among these graduates there are some very young people and considerable numbers who are more mature, since their opportunity for a college education was postponed because of the service they gave to their country during World War II.

College professors are almost unanimous in their praise of the general attitude and earnestness of purpose which has been displayed by the latter group throughout their period of collegiate instruction. The profession expects much of all of these graduates. It probably expects more of those who have obtained their education after the maturing experiences in the armed forces. Certainly there is a place and much work to do for all who leave college halls this year to take their places in one or another of the many subdivisions of American pharmacy.

It is to be doubted whether any class has ever graduated at a time when opportunities for professional development were greater. Not only are many of our pharmacies and hospitals in need of additional prescriptionists, but the multiple unit organizations, the detail and sales departments of drug manufacturers, the production departments of the same manufacturers, and many governmental agencies are looking for well-trained, capable, enthusiastic, and dependable pharmacists.

Commencement addresses and the farewell messages of deans will supply much needed and competent advice to the graduates. As the organization which will be most active during the lives of the present generation of pharmacists in providing their continuing education, the AMERICAN PHARMACEUTICAL ASSOCIATION adds to its welcome to the new pharmacists, a word of advice and caution.

The advice is to take immediate steps to remain in constant touch with the progress of pharmacy. This can be accomplished by regular reading of the professional and scientific journals, and by joining and attending meetings of national and state organizations, which make it their business to foster the interests of pharmacy and serve their members.

The word of caution is to develop and exercise your own professional judgment. The thing that sets a professional man or woman apart from others is that the public has been schooled to look to professional people to be able to supply sound judgment in the field for which they have been trained. We are constantly asking the public not to rely on its own judgment or on the judgment of incompetents for advice dealing with any phase of medicine or medical care. If this advice to the public is to mean anything as far as pharmacy is concerned, we must be sure that pharmacists will continually strive to develop their own abilities and techniques and sources of authentic information so that they will be in a position to supply expert advice on the professional, social, and economic aspects of problems dealing with pharmacy or pharmaceutical services.

To the graduates who have been members of student branches of the AMERICAN PHARMACEUTICAL ASSOCIATION, the ASSOCIATION is no stranger, and they will automatically be transferred from associate to active membership. To those who for one reason or another failed to join a student branch, the ASSOCIATION extends a most cordial invitation to become active members now. A note to the headquarters of the ASSOCIATION, addressed to the secretary, will bring further details. Our members are urged to invite recent graduates to join the AMERICAN PHARMACEUTICAL ASSOCIATION and to sponsor their membership.

The Kelly Memorial

The pharmacists of Maryland are to be commended for undertaking the establishment of a permanent headquarters building in the State of Maryland, which is to be known as the Kelly Memorial. It is altogether fitting that such a memorial building should be erected in the City of Baltimore, where Dr. Kelly functioned for so many years as dean of the College of Pharmacy of the University of Maryland, as secretary of the Maryland Pharmaceutical Association, and later as secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION.

About one-half of the twenty years that Dr. Kelly served as the first full-time secretary of the ASSOCIATION was spent in the City of Baltimore, where the headquarters of the ASSOCIATION were located until the present building in Washington was completed in 1934.

Although he was born in North Carolina, Dr. Kelly spent most of his adult life in Maryland. There he had his permanent residence and there he served not only as a teacher, but also as secretary of the Maryland Pharmaceutical Association and as a member of the Maryland State Board of Health. The latter activities were continued during much of his term of office as secretary of the A. PH. A.

Although originally a Maryland project, since it is to house the offices of the Maryland Pharmaceutical Association, it is quite fitting that the committee in charge of raising funds for this memorial, headed by Dr. H. A. B. Dunning, should turn to the large circle of friends and admirers of Dr. Kelly in pharmacy throughout the nation for additional contributions.

All those who worked with Dr. Kelly or who benefited from his efforts as secretary and general manager of the AMERICAN PHARMACEUTICAL ASSOCIATION, and in his various other capacities, now have the opportunity to add their contribution to the funds which have been raised in the State of Maryland so that this memorial may turn out to be a building with facilities commensurate with the standing and achievements of the man this memorial is to honor.

Contributions should be sent to Dr. H. A. B. Dunning, chairman of the Kelly Memorial Committee, Chase and Charles Streets, Baltimore, Maryland.

A Word About Packaging

The medicine cabinets of America give mute testimony of the degree of interest manifested by manufacturers of pharmaceutical preparations and the dispensers of prescriptions and household drugs in the convenience of the consumer.

Few people take enough interest in their medicine cabinets to provide them with stock containers neatly labeled which they refill from bulk packages purchased at the pharmacy. Therefore, the appearance of the family medicine cabinet depends almost entirely on the kind of container chosen by the producer or dispenser for the drugs which the family uses.

Here is an opportunity to create a favorable impression which is overlooked by many who supply drugs and medicines, to a degree which is almost incomprehensible. A sloppy package with a label that will not stand much handling, and is not too legibly inscribed in the first place, is certainly not conducive to respect for the product or the supplier.

Containers which are over-size for the net quantity of content and containers which do not fit well into the ordinary medicine cabinet always create a poor impression, and it should be recalled that the impression lasts as long as the product has to be used. Thus, there is a continual renewal of the dissatisfaction in the mind of the user whenever it is necessary to pick up the container.

Manufacturers are undoubtedly giving

(Continued on Page 347)

The Address of the President-Elect

A. Ph. A's 1949 Convention at Jacksonville

GLENN L. JENKINS
President 1949–50

IT is reported that in a British college many years ago a group of undergraduate students formed "The Society for Viewing Things as a Whole." Perhaps we as members of the AMERICAN PHARMACEUTICAL ASSOCIATION ought to regard ourselves as members of a society for viewing pharmaceutical things as a whole.

Although it has been said that the office of president of this ASSOCIATION may be characterized by the words,

> "The curtain's lifted
> The stage is set,
> Bow to the audience,
> Marionette."

as president-elect, I refuse to believe that this is true. Consequently, I propose to view and review with you certain "things as a whole" that constitute major problems confronting American pharmacy. The problems of American pharmacy, and indeed of world pharmacy, are problems with which this ASSOCIATION must deal because no other single agency in our country has that great over-all responsibility.

The Scope of American Pharmacy

It should be borne in mind that the term American pharmacy represents those who engage in retail or hospital practice in commercial and professional pharmacies, wholesalers, manufacturers, importers, exporters, students, teachers, research workers, law enforcement and organization officials, representatives who call on physicians, journalists, peddlers, advertisers, and, in fact, it includes everyone who does anything, good or bad, in a manner evident to the public as being pharmaceutical in nature. This truth should be kept in mind because we are likely to forget that all areas of our profession are the concern of this ASSOCIATION.

Fortunately, the Pharmaceutical Survey has viewed many of our problems in a highly competent manner and, for that reason, we need not review them here. Nevertheless, it should be emphasized that the Pharmaceutical Survey has only delineated the problems and recommended means for their solution. The actual work of solving the problems largely remains to be done.

Cause for Pride

As we look back at the pharmaceutical accomplishments of the past, we have just cause for pride. The scientific discoveries and improvements in drugs during the past few years probably have contributed more to the happiness, general welfare, and health of our citizens than have the contributions from any other field. Pharmaceutical research workers, physicians, chemists, bacteriologists, educators, business executives, government officials and many others have made extensive and important contributions. There is credit enough for all. Advances have brought about a veritable revolution from drug nihilism to a justified faith in drugs.

The manner in which our industries, practicing pharmacists, schools and organizations met the

needs of our own nation and of other countries during the war and in the post-war period represents a magnificent achievement under the democratic system of free, competitive enterprise. Likewise, the manner in which our profession, largely through the efforts of this ASSOCIATION, has improved the status of pharmacists in many agencies of the federal government, its relationship to the other professions and sciences, its participation in public health programs, and the total educational program of pharmacy are highly commendable.

Self-Regulation

Since the early days of our country pharmacists have organized into professional groups on the basis of common interest and social duty rather than because of economic monopoly. These groups developed from the local to the state and to the national level. They have established qualifications for admission into the profession, educational procedures, and have sought the enactment of laws in the public interest to control the quality of products and to govern the conduct of members of the profession. With the increasing complexity of our economic and social structure, there has been a growing trend away from control from within the profession to control by governmental agencies. There has been also a rapid transition from local and state to national control. This transition is made evident by the ever-increasing scope of the activities of the Federal Food and Drug Administration. The broadening of the scope of this agency through court decisions such as the Sullivan case which gives control of labeling to the level of the ultimate purchaser affects every practitioner. Actions seeking to gain greater control by fiat or court decision over the distribution of new drugs, old ones such as glandular products, the regulation of refillable prescriptions, and the proposal that physicians report all pharmacists who allegedly violate the prescription legend are indicative of the ever-increasing encroachment on our professional liberties.

The enforcement of the laws and regulations have been directed and applied particularly to pharmacy practice. At the same time large quantities of drugs are stored, dispensed without label or improperly labeled, and otherwise are provided to our citizens without adequate and competent pharmaceutical supervision in offices, clinics, some hospitals, sanitariums, nursing and convalescent homes, and other places where people have a right to expect the highest type of professional pharmacy service. Action has been taken by federal agencies against the splitting of fees by those who fill optical prescriptions. No action has been taken, however, against the trend toward the establishment of clinics with employee-pharmacists, which portends possibilities of fee splitting in an indirect and dangerous form.

It is not my intention to debate the right or wrong of the legal regulation of pharmaceutical practice by governmental agencies at the national level. Neither do I question the need for control of the distribution of drugs down to the consumer level nor the high purpose of those who administer such controls in the various agencies of government. I do contend that the profession of pharmacy which has striven always to improve the standards of its own services deserves and should have a high place and an adequate representation in any and all agencies authorized by law to control the production, standardization, and distribution of drugs. Now, while the reorganization of various administrative agencies of government is under consideration, is a logical time to seek and establish proper authority and representation so that we may retain a reasonable assurance of professional freedom.

Professional Freedom Has Its Price

Our forefathers in pharmacy made the initial payment on the professional freedom that they handed down to us. They paid in terms of public service, hard work, intelligent foresight and constant alertness to protect their professional liberties. The freedom to govern our professional selves in part, to have a substantial monopoly on the supply of drugs and medicinal items, to work and to progress through earnest and able efforts in behalf of better service which has been bequeathed to us, is a precious possession, but this freedom which we inherited was not bought outright. The purchase installments run from generation to generation. We in our time are again called upon to contribute to the maintenance of our heritage through hard work and intelligent action; but action to be intelligent must be informed.

Why do we call attention to the fact that professional freedom has its price at this time? It is because professional men assume the burden and responsibility to pass on their heritage to the next generation at least intact and, if possible, with some added increment. But, you ask, is that heritage in danger? I think it is. Most of us here in this room have already lived to see the cycles of economic depressions and booms, world-wide upheavals in which one-half of the population of the earth has lost the right of free enterprise, the disappearance of the individual and his replacement by group action. Indeed, the civilization of our youth and to a large extent the civilization of the generations that preceded us is gone. Its guarantees of a stable society no longer prevail. Its agreements for the preservation of peace and concord among nations have been suspended. The conceptions of individual liberty and of private property that prevailed in our youth are being given new interpretations. Men live in fear of social and economic chaos. The heroes of yesterday have been deflated and the mass man has been created to take their place. Respect for law which was and must be the very foundation of democracy is attacked in new ways. Propaganda is the new instrument of popular education and vaster sums are spent upon it than upon the established schools. Science and technology have entered

national policy and have produced a dynamic change in society. Our modern dynamic pharmacy must be organized to meet changing trends.

Integrated Organizations

The AMERICAN PHARMACEUTICAL ASSOCIATION through the years has stimulated the formation of many independent or semi-independent organizations. Other organizations, such as those of manufacturers and wholesalers, came into being to meet the specialized problems associated with the mass production and distribution of drugs.

The progress in transportation and communication between the states and the extensive migratory habits of people from state to state make it evident that the center of thinking, regulation and control has moved from the local to the national level. No longer may it be considered that a college serves as a community college, that a licensing board serves only as a state-wide agency, that a group such as the manufacturers or wholesalers are independent of all other groups and individuals within American pharmacy. All segments of pharmacy organized on a national basis should be integrated with this ASSOCIATION so that we may have the power to discharge our professional responsibility to our fellow men in full measure.

The American Society of Hospital Pharmacists has been organized as an integral part of the AMERICAN PHARMACEUTICAL ASSOCIATION. Its mode of organization and integration might well serve as a pattern for other groups having specific functions of their own. Such groups should be closely allied with this ASSOCIATION and their policies and activities should be channeled through the AMERICAN PHARMACEUTICAL ASSOCIATION.

Membership

Article 1 in paragraph 1 of our constitution states that "This Association shall be called the 'AMERICAN PHARMACEUTICAL ASSOCIATION.' Its aim shall be to unite the educated and reputable pharmacists and druggists of America in the following objects ...." Since the adoption of that objective, there have been many pleas and recommendations by former presidents and other officers and committees and there have been mandates from the House of Delegates that a well-planned membership drive be conducted. It would be unfair to say that no program to increase the membership has been carried out. I know that President Little and Secretary Fischelis and others have made diligent efforts to secure new members. Nevertheless, I do not believe that a real intensive effort on a nation-wide basis has been carried out. It is easy to understand that officers of the ASSOCIATION burdened with numerous other duties cannot devote the necessary time and effort to membership activities. Some progress has been made but much more is needed.

I am convinced that we should conduct a nation-wide membership campaign this year, utilizing every possible resource of the ASSOCIATION for this purpose. I feel certain that once the pharmacists of America understand that the control of the profession is shifting from a local to a national basis they will unite with this ASSOCIATION into a coherent group to meet the social responsibility of professional men. Our objective should not be to secure only 30,000 members by 1952, as was recommended last year, but to complete the substantial enlistment of every qualified pharmacist as a member by 1952.

The Creation of a Professional Attitude

Dr. Elliott, in speaking of his experiences while conducting the Pharmaceutical Survey, has pointed out the evident absence of jealousy for the profession or pride in the profession. I have observed as the member of a state board of health that no physician is ever appointed to a local, state or other position unless he is a member in good standing of his professional association. In my work I frequently certify that graduate students have completed a required number of credit hours in chemistry so that the students may gain membership in the American Chemical Society.

In my opinion, we have been unduly lenient in admitting persons to membership in this our national professional association. I hold that we should seek to create an attitude of mind that no pharmacist is a full-fledged professional man unless he is a member of this ASSOCIATION. I would make active membership in this ASSOCIATION a basic and preferential requirement for entry into graduate work and for positions on the faculties of our colleges in professional areas of instruction, for nomination to office in state and national associations, for membership on licensing boards, for employment in pharmaceutical work in retail, hospital, wholesale, manufacturing, governmental and other establishments. In my opinion, the time has arrived when we should differentiate between those who cultivate the professional spirit, nurture the ideals of service, strive to preserve our liberties, and seek to fulfill our professional obligations, and those who parasitically take all our ASSOCIATION gives but give nothing in return.

Medical Care Programs

Several of my friends and members of this ASSOCIATION have suggested that I take a strong stand relative to the proposed medical care programs under consideration by the Congress of the United States. The ASSOCIATION has already resolved to oppose any plan that would interfere with the free choice of physician or pharmacist. The discussions before this Convention and resolutions presented by appropriate committees will establish the policy of the ASSOCIATION. Every pharmacist in our nation has a right to participate in determining what the policy of the ASSOCIATION shall be; the right to participate is limited only by the price of membership.

My personal views are conservative, although I

hold the position expressed by Henry Davis Thoreau, "It is never too late to give up your prejudices. No way of thinking or doing, however ancient, can be trusted without proof." It is my opinion that any effort to change the basic health program in this country should be the product of the health professions and should at the same time have their united support.

Education

The American people owe a debt of gratitude to the colleges and universities of our country. Limiting our comments to the area of pharmaceutical education, our schools have met the tremendous post-war demands in a highly commendable manner. I think it was entirely proper to expand enrollments in our schools to care for the veterans, and I think our schools have been able to do a fine job in their behalf.

The Pharmaceutical Survey has recommended that a six-year course be established to train professional men in pharmacy for specialized services. Some of our educators have interpreted this recommendation to mean that all schools of pharmacy at some fixed time should establish a six-year course as a minimum. I do not intend to elaborate upon the pros and cons of an extended program of education in pharmacy, since the problem has been and will be considered carefully by the American Association of Colleges of Pharmacy and the American Council on Pharmaceutical Education. I do wish to call the attention of our members to certain trends voiced by educational authorities so that our thinking about educational problems may be rationalized, namely:

1. Science is now recognized as the raw material of power—power for a nation, an industry or a profession. Science is growing into a new "self-conscious" period of life because of its great scope and influence on our general economy and on society. A new emphasis on general educational requirements, particularly in the social sciences and humanities, has been given in our professional and scientific schools. This emphasis has developed in response to a recognition of the growing importance and increased responsibilities of professional and scientific men in our social structure.

2. The President's Commission on Higher Education forecasts or advocates a total enrollment in colleges of 4.6 million in 1960, a figure almost double present enrollments. This forecast is undoubtedly excessive but it indicates that we may expect large enrollments in our colleges to continue.

3. Public Law 346 with its amendments, commonly referred to as the "G.I. Bill of Rights," comprised the largest single appropriation for direct educational purposes ever enacted in the history of education and involves a total sum (including subsistence allowances) in excess of twenty billion dollars. The depletion of this source of revenue has led to what is called "The Crisis in Higher Education." Competent experts estimate that public universities and colleges must increase their financial support sixty to seventy-five per cent in the biennium 1950–1952, in order to enable the schools to operate, not at improved or extended levels of effectiveness but at the current levels. Federal subsidy for education has been proposed as an easy way to meet the situation. Federal support of secondary school education in order to equalize educational opportunities in all states may be advisable. A limited program of federal scholarships as proposed in the national science foundation bill seems desirable. Any general subsidy of higher education, however, must be viewed as dangerous by all who would preserve our democratic system of educational and scientific liberties. Few people realize, I believe, how easy it is for any federal agency or other unit of government to gradually, unobtrusively and yet surely obtain definite control and direction over any institution or profession by controlling its operating funds.

4. There is an increasing opinion that the educational programs, for example, in chemistry and biology where the upper strata of students completing the undergraduate program are selected for graduate work, are superior to extended programs of professional education. Areas with extended professional programs such as medicine and dentistry have found it necessary to establish technician levels of training to meet practical requirements of service.

5. The maintenance of a continuing high educational level by our professional practitioners presents diverse, difficult, and challenging problems. The schools of pharmacy by institutes, refresher courses, and other means may render valuable service. The chief responsibility must rest, however, on the individual pharmacist who, through membership in and study of the journals of the AMERICAN PHARMACEUTICAL ASSOCIATION, can acquire reliable information and keep informed about the latest advances in the profession.

6. One of the greatest educational problems confronting us is that of discovering a way to enable all men to live together in peace and use the riches of the world for the general welfare and happiness. I believe that the AMERICAN PHARMACEUTICAL ASSOCIATION can help in the attack on this great problem by continuing to foster increased understanding and friendship among the pharmacists of different nations, by cooperating with UNESCO in the support of exchange of students, international meetings and participation in international health organizations, and by continuing to disseminate our professional and scientific literature throughout the world.

In the educational area we need to work for:

(*a*) The strengthening of the four-year program by providing stronger faculties, better selection of students, and improved facilities and equipment for the faculties and students to do their work;

(*b*) A sound program of instruction at the ad-

vanced professional level such as that embodied in the proposed six-year course;

(*c*) Greater emphasis on graduate work to train scientific research workers for the profession with increased support from state and federal agencies, foundations, endowments, and the industry; and

(*d*) The increased extension of our educational facilities to students from other lands as rapidly as conditions permit.

Program of the A. A. A. S.

The AMERICAN PHARMACEUTICAL ASSOCIATION is an affiliated society in the American Association for the Advancement of Science and is represented on its Council. The American Association of Colleges of Pharmacy is an associated society in this same organization. The Medical Sciences Section of the American Association for the Advancement of Science is divided into subsections on medicine, dentistry and pharmacy. For several years the Subsection on Pharmacy has planned scientific programs and held meetings at the same time and place as the meeting of the American Association for the Advancement of Science. The rapid growth of research and scientific developments in pharmacy make it desirable that the Scientific Section of our ASSOCIATION hold interim meetings. It is also desirable that this ASSOCIATION be more directly affiliated with efforts to improve the effectiveness of science and the professions in human welfare, and to increase public understanding and appreciation of the importance and promise of the methods of science and the professions in human progress. It is proposed, therefore, that plans be made for the Scientific Section of the AMERICAN PHARMACEUTICAL ASSOCIATION to take over and operate the program of the Subsection on Pharmacy of the American Association for the Advancement of Science.

Recommendations

1. I recommend that the AMERICAN PHARMACEUTICAL ASSOCIATION conduct an intensive nationwide membership campaign during the year 1949–1950 and that the Council and officers be directed to provide the necessary personnel and resources required for this purpose.

2. It is recommended that the Scientific Section of the AMERICAN PHARMACEUTICAL ASSOCIATION take over and operate the Subsection on Pharmacy of the American Association for the Advancement of Science, and that the Council and the officers of the Scientific Section take such action as may be necessary to accomplish this change.

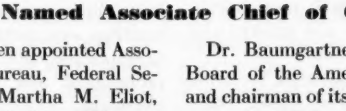
Numerous other recommendations will be presented by committees, sections and officers of the ASSOCIATION, and it is not necessary to duplicate them here. I wish to emphasize that our prime task in the year ahead is to further organize and integrate into the ASSOCIATION the organized segments of the profession as well as the individual pharmacists so that the AMERICAN PHARMACEUTICAL ASSOCIATION may have the power to meet the problems presented in the confused sociological and economic era of our generation. If I were to offer any other recommendation it would be that we proceed to do and carry forward toward a more successful conclusion the objectives set forth in the ASSOCIATION'S constitution and that we do those things we have already resolved to do.

Conclusion

It would be especially appropriate, perhaps now more than at any other time for several decades, for pharmacists to ponder the words of Brutus to Cassius in planning their future course of action,

> "There is a tide in the affairs of men,
> Which, taken at the flood, leads
> on to fortune;
> Omitted, all the voyage of their life
> Is bound in shallows and in miseries.
> On such a full sea are we now afloat;
> And we must take the current when it
> serves
> Or lose our ventures."

I shall dedicate my best efforts in the year ahead to a program of action so that the hopes expressed in our resolutions may be made into realities. In these efforts you are asked to give your full support and cooperation.



Dr. Baumgartner Named Associate Chief of Children's Bureau

Dr. Leona Baumgartner has been appointed Associate Chief of the Children's Bureau, Federal Security Agency, to succeed Dr. Martha M. Eliot, who recently resigned to become Assistant Director General of the World Health Organization. Dr. Baumgartner comes to the Children's Bureau after 12 years of service in the New York City Health Department, including work as a District Health Officer, and as director for eight years of that Department's Bureau of Child Hygiene.

Dr. Baumgartner is a member of the Executive Board of the American Public Health Association and chairman of its Committee on Child Health, and a member of the American Academy of Pediatrics and of the American Pediatric Society. In addition to her medical degree, which she obtained at Yale University, Dr. Baumgartner has a Ph.D. in public health, also from Yale. She received an M.A. in bacteriology and immunology from the University of Kansas.

STRAIGHT FROM HEADQUARTERS

(Continued from Page 341)

more attention to the container problem from the standpoint of appearance and utility, than the average dispenser. Actually, the dispenser has no say in determining the appearance, quality or utility of the container in which the manufacturer supplies his product. However, he can discriminate between products of the same or similar composition by giving preference to the one which has the more desirable container from the standpoint of its utility to the consumer. This is an exercise of professional judgment which the consumer expects the pharmacist to exercise.

But every pharmacist has the personal problem of supplying the products, which he prepares extemporaneously, in satisfactory containers and with respectable labels. This is a matter that should not be taken lightly because a good impression of a pharmacy created by the personnel which contacts those who buy drugs and who require prescriptions, can frequently be spoiled through lack of attention to the permanent reminder of the establishment, namely, the package which occupies a space in the consumer's home.

Bottles of the right color, shape and size for the particular drug or medicine dispensed, labeled with an artistically designed and easily read label, add to the comfort of the user and help to create a favorable impression of the supplier. There is more to producing this lasting favorable impression than merely giving an order to a printer or to a glass or paper-container salesman. Real comparisons should be made of the quality of paper or glass and of the facility for labeling the container. Special note should be taken whether the label will stick to the kind of a container supplied, and in the case of paper containers, much attention should be given to the durability, the design and the appropriateness of the box for the drug or inside container to be packaged.

A nice professional window display, courteous attention in the pharmacy, accurate compounding, and fair pricing, can all be offset in the mind of the user of a medicine if the final package which he carries home and from which he must use the daily dose of the drug is defective or inefficient in some respect.

DELGADO IN PHILIPPINES

Friends of Frank A. Delgado, who has practiced pharmacy in many capacities since the early 1900's, will be interested to learn that he is now serving as branch manager of the Philippine American Drug Co. (Botica Boie) and is also in charge of the wholesale and sales department of the same organization.

The main office of the Philippine American Drug Co. is located at 95 Escolta, Manila, Philippines, and Mr. Delgado may be reached at that address.

Writing of his recent interesting experiences, Mr. Delgado tells of opening a new branch of the firm at Davao in Southern Mindanao. The island of Mindanao is said to be the fastest growing section of the Philippines. It is rich agriculturally, has large lumber deposits and ample supplies of copra. However, because of poor roads, transportation is limited to boat or plane and consequently distribution costs of stocks for the pharmacies run unusually high, Mr. Delgado reports.

After operating his own retail pharmacy in Florida, Mr. Delgado served in World War I and later was connected with the American Red Cross. In 1926 he became a member of the Chemical Division of the Bureau of Foreign and Domestic Commerce of the U. S. Department of Commerce. Early in 1931 he was assigned to the Merchandising Research Division to serve as drug and chemical consultant for The National Drug Store Survey (popularly known as the "St. Louis Survey") and was in charge of the prescription phase of the survey. He is also the author of numerous articles and papers concerning various phases of the drug survey, both foreign and domestic.

As technical adviser for the pharmacy exhibit he served the Century of Progress Exposition at Chicago and from 1930 to 1940 he served as assistant secretary of the U. S. P. Convention.

In 1936 he was elected first vice-president of the AMERICAN PHARMACEUTICAL ASSOCIATION.

Research Grants

Sixty-five grants, totaling nearly $250,000, to aid scientific research in colleges, universities and institutes were made known recently by Dr. Joseph W. Barker, president of Research Corporation. One grant of $54,550 was to Dr. George W. Kidder of Amherst College, who has reported success in halting growth of tumors in mice by means of dietary control. Another recipient, Dr. Edward C. Kendall of Mayo Clinic, recently demonstrated effective use of an adrenal hormone in the control source of rheumatoid arthritis.

A FURTHER SIMPLIFICATION IN THE USE OF ISOTONIC DILUTING SOLUTIONS

by JOSEPH B. SPROWLS*

IN RECENT months much attention has centered around the use of isotonic buffered diluting solutions. The term "diluting solution" has been applied to solutions which have been buffered and adjusted with respect to their osmotic pressure so as to be approximately isohydrionic and isosmotic with some body fluid, such as the lachrymal fluid. This solution is then used as a solvent for drugs which are to be applied to the area normally in contact with the body fluid which has been used as the standard of comparison.

Development of Formulas

Major attention has centered around the development of suitable diluting solutions for use in the preparation of ophthalmic prescriptions, and formulas for a number of such solutions have been presented by several authors. Earliest among these were the formulas of Gifford and Smith[1] which, while not isotonic, presented a series of buffered solvents for various ophthalmic medications. Feldman's buffers[2] were used in a similar fashion. These earlier formulas were somewhat difficult to use, since they required accurate measurement and mixing of two stock solutions in order to obtain a solvent of the desired *p*H value.

More recent authors have attempted to present formulas for one or more isotonic stock solutions each having *p*H values within the range which seems most desirable for a group of drugs or for a special use. Such formulas have been presented by Arrigoni, Tozer, and Fischer,[3] by Hind and Goyan,[4] and by White and Vincent.[5] While very similar in intent, these formulas vary somewhat in the choice of buffers used as well as in *p*H value. Hind and Goyan, for example, have presented a compromise between the optimum value for therapeutic effectiveness and the optimum value for stability of the drug. These authors present formulas which are isotonic with blood serum. Other writers have insisted upon the use of formulas which are isotonic with 1.4 per cent sodium chloride, the value which has been most often presented as representing the salt concentration of tears.

It is not our purpose to reproduce in this article the various formulas which have appeared in the literature, nor to discuss the virtues of each. It is our purpose to deal with the use of diluting solutions in the compounding of ophthalmic prescriptions.

Problem of Adding Drug

In the use of any diluting solution the pharmacist is faced with one problem which occurs whenever he adds an appreciable amount of drug to the solution. The problem is how he can add the drug to an already isotonic diluting solution without producing a solution which will be hypertonic. Since the added drug will probably be dissolved in water before incorporation into the diluting

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liquid, the solution to the problem can be suggested by asking the question in another way: How much water should be used in dissolving the drug in order not to disturb the isotonic nature of the diluting solution?

Recommended Equation

Goyan[5] has discussed this problem and has suggested that "the common practice of making solutions by adding one gram or less of a drug to 100 cc. of a 0.9 per cent solution of sodium chloride is not likely to result in unwarrantable hypertonicity." While this statement is undoubtedly well founded, it is believed that there are many who will prefer to use a more exacting technique. White and Vincent[6] also have recognized this problem and have presented a relatively simple equation by which it may be solved, an equation which makes use of the sodium chloride equivalent of the given drug. The equation recommended by these authors is as follows:

$$V = W \times E \times v$$

where:

- V = the volume of solution that the medicinal agent will make isotonic.
- W = the weight of medicinal agent to be dissolved.
- E = the sodium chloride equivalent of the drug.
- v = the volume in cc. (or minims) occupied by 1 Gm. (or 1 grain) of sodium chloride in isotonic solutions.

Realizing that any simplification which can be effected is important to the pharmacist both because it saves time and because it encourages use of diluting solutions, we have attempted to devise a method which minimizes the amount of calculation involved. v in the equation of White and Vincent is a constant for a given isotonic value. W has a constant value when it relates to a constant volume of solution of given percentage strength (0.3 Gm. for one fluidounce of a one per cent solution). It becomes possible, therefore, to simplify the calculations by presenting a table which shows the volume of water to be used in the preparation of an isotonic solution from the quantity of drug used in a one-ounce prescription containing one per cent of any given drug. (See Table I on Page 350.)

Since authors are not agreed as to whether ophthalmic prescriptions should be isotonic with 0.9 per cent sodium chloride or with 1.4 per cent sodium chloride, the table presents suitable information for use with either type of diluting solution.

In using the table in the compounding of a prescription, the pharmacist refers to the name of the drug which is called for. Here he will find the amount of water which should be used in conjunction with the diluting solution in preparing one ounce of a one per cent solution. If the prescription calls for a percentage greater or less than one, it is obvious that he must correct for this difference by multiplying the table value by the percentage strength called for. If the volume of liquid called for is greater or less than one ounce, he must multiply by the number of ounces (or the fraction of an ounce) desired. It will be noted that these corrections resemble the procedures which are used in the preparation of percentage solutions. The drug, in prescribed quantity, is dissolved in the calculated amount of distilled water and enough diluting solution is added to make the required volume.

Use of Table Demonstrated

Use of the table will be demonstrated by the prescriptions which follow.

(1) ℞

Physostigmine Salicylate 1%
in Buffered, Isotonic Solution*
..... 30.0 cc.

The pharmacist is using a diluting solution which is isotonic with 1.4% sodium chloride. Reference to column B of the table shows that the required quantity of drug (0.3 Gm.) should be dissolved in 4.1 cc. of distilled water. Sufficient isotonic buffered diluting solution is added to make a volume of one fluidounce, and the prescription is complete.

(2) ℞

Sodium Sulfathiazole Sesquihydrate..... 0.6
Isotonic buffered solution,
q. s. ad..... 15.0

* In each instance the *p*H of the buffered solution desired should be recommended by the physician.

TABLE I

Table showing volume in cubic centimeters of water required to dissolve a 1% concentration of various drugs in order to prepare one fluidounce of a solution isotonic with blood serum or tears.*

A 0.9% NaCl (Blood Serum)	1 per cent (0.3 Gm.) of:	B 1.4% NaCl (Lachrymal Fluid)
6.3	Alum (potassium)	4.1
6.0	Alypin hydrochloride (amydricaine hydrochloride)	3.9
37.7**	Ammonium chloride	24.2
6.7	Amphetamine sulfate (benzedrine sulfate)	4.3
6.7	Amylcaine hydrochloride	4.3
5.7	Antipyrine	3.6
6.3	Apothesine hydrochloride	4.1
4.7	Atropine sulfate	3.0
10.0	Benzyl alcohol	6.4
18.3	Boric acid	11.8
3.3	Butacaine sulfate (butyn sulfate)	2.1
4.3	Caffeine	2.8
24.3	Calcium chloride (no H_2O)	15.6
4.7	Calcium gluconate	3.0
7.0	Calcium lactate	4.5
7.0	Camphor	4.5
6.0	Chlorobutanol	3.9
6.3	Cocaine hydrochloride	4.1
5.0	Cupric sulfate	3.2
5.3	Dextrose	3.4
4.3	Diothane hydrochloride	2.8
4.7	Emetine hydrochloride	3.0
9.3	Ephedrine hydrochloride	6.0
6.3	Ephedrine sulfate	4.1
8.7	Epinephrine hydrochloride	5.6
5.0	Ethylhydrocuprine hydrochloride (optochin)	3.2
5.3	Ethylmorphine hydrochloride (dionin)	3.4
6.0	Eucatropine hydrochloride (euphthalmine)	3.9
6.3	Fluorescein sodium	4.1
11.7	Glycerin	7.5
6.3	Homatropine hydrobromide	4.1
4.3	Hyoscine hydrobromide (scopolamine hydrobromide)	2.8
5.0	Hyoscine hydrochloride	3.2
4.0	Iodophthalein sodium	2.6
3.7	Lactose	2.4
6.0	Larocaine hydrochloride	3.9
14.0	Magnesium chloride ($6H_2O$)	9.0
6.7	Magnesium sulfate	4.3
7.0	Menthol	4.5
4.0	Mercuric chloride	2.6
4.7	Mercuric cyanide (no H_2O)	3.0
4.7	Mercuric succinimide	3.0
8.0	Methanamine	5.1
6.7	Metycaine hydrochloride	4.3
6.3	Mild silver protein (Argyrol)	4.1
5.0	Morphine hydrochloride	3.2
4.0	Morphine sulfate	2.6
9.3	Neosynephrine hydrochloride	6.0
5.0	Nupercaine hydrochloride	3.2
5.3	Phenacaine hydrochloride (holocaine hydrochloride)	3.4
9.0	Phenobarbital sodium	5.8
11.7	Phenol	7.5
6.3	Physostigmine salicylate	4.1
4.0	Physostigmine sulfate	2.6
7.3	Pilocarpine hydrochloride	4.7
7.0	Pilocarpine nitrate	4.5
28.0	Potassium chloride	18.0
12.7	Potassium iodide	8.1
20.0	Potassium nitrate	12.9
13.3	Potassium phosphate, monobasic	8.6
8.0	Procaine hydrochloride	5.1
10.3	Propadrine	6.6
5.3	Quinine hydrochloride	3.4
8.7	Quinine and urea hydrochloride	5.6
13.0	Silver nitrate	8.4
24.7	Sodium acetate (no H_2O)	15.9
15.0	Sodium benzoate	9.6
23.0	Sodium bicarbonate	14.8
15.0	Sodium biphosphate	9.6
14.3	Sodium borate	9.2
20.7	Sodium bromide	13.3
10.0	Sodium cacodylate	6.4
22.7	Sodium carbonate, monohydrated	14.6
33.3**	Sodium chloride	21.4
10.7	Sodium citrate	6.9
18.0	Sodium hypophosphite	11.6
12.7	Sodium iodide	8.1
17.3	Sodium lactate	11.1
20.7	Sodium nitrate (no H_2O)	13.3
17.0	Sodium phosphate (no H_2O)	10.9
13.7	Sodium phosphate ($2H_2O$)	8.8
9.0	Sodium phosphate ($7H_2O$)	5.8
6.7	Sodium phosphate ($12H_2O$)	4.3
13.3	Sodium salicylate	8.6
9.3	Sodium sulfate	6.0
19.3	Sodium sulfite	12.4
10.3	Sodium thiosulfate	6.6
1.3	Strong protein silver (protargol)	0.9
3.3	Sucrose	2.1
7.0	Sulfadiazine sodium	4.5
6.7	Sulfanilamide	4.3
6.7	Sulfapyridine sodium	4.3
6.3	Sulfathiazole sodium, sesquihydrate	4.1
4.7	Syntropan	3.0
1.0	Tannic acid	0.6
6.3	Tetracaine hydrochloride (pontocaine hydrochloride)	4.1
6.7	Tutocaine hydrochloride (butamin)	4.3
18.0	Urea	11.6
20.0	Zinc chloride	12.8
5.0	Zinc phenolsulfonate	3.2
5.0	Zinc sulfate	3.2

* Values calculated by the equation of White and Vincent[5] using sodium chloride equivalents as presented by these authors.

** Values are obviously meaningless because of high osmotic effect of substance in one per cent concentration.

The amount of drug used here corresponds to a 4 per cent solution. If the pharmacist is using a diluting solution of the same osmotic value as before, the table shows that he would use 4.1 cc. of water for one fluidounce of a one per cent solution. For $^1/_2$ ounce of a 4 per cent solution he would use 8.2 cc. of water ($4.1 \times {}^1/_2 \times 4 = 8.2$). The diluting solution is then added to make a total volume of 15 cc.

If more than one drug is contained in a prescription, the volumes of water to be used are additive. Thus, using an example from the paper of White and Vincent (5):

(3) ℞

Neosynephrin Hydrochloride	0.3 ($^1/_2$%)
Chlorobutanol	0.2 ($^1/_3$%)
Distilled water, *q. s. ad*	60.0 cc.

M. Ft. isotonic and buffered nose drops.

Distilled water needed:

for Neosynephrin..... $9.3 \times {}^1/_2 \times 2 = 9.3$ cc.

for Chlorobutanol..... $6.0 \times {}^1/_3 \times 2 = 4.0$ cc.

13.3 cc.

Robert C. Wilson—A. Ph. A. Honorary President

DR. ROBERT C. WILSON of Athens, Ga., was elected honorary president of the AMERICAN PHARMACEUTICAL ASSOCIATION for the current year at the recent Jacksonville Convention. Dr. Wilson, beloved Dean Emeritus of the School of Pharmacy at the University of Georgia, was unanimously chosen for this honor by the A. PH. A. House of Delegates because of his long career of distinguished service to the profession of pharmacy.

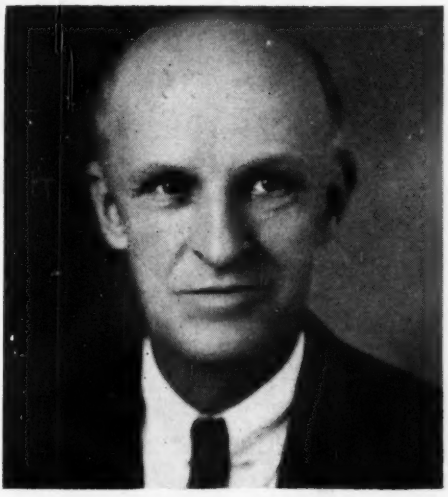
A native of Sparta, Ga., Dr. Wilson frequently has been called "the father of modern pharmacy in Georgia." He became interested in chemistry and related sciences in his high school days in Sparta.

He received his license in 1903 as a registered pharmacist after completing the required practical training.

Later he entered the University of the South at Sewanee, Tenn., to study pharmacy and medicine. In 1907 he accepted a position as an instructor in pharmacy at the University of Georgia and has been associated with that school ever since. In 1908 he received his degree in pharmacy from the University of the South and then completed two years of the course in the medical school of that institution.

In 1911 Dr. Wilson attended the Medical College of the University of Michigan, specializing in physiological chemistry. Four years later he was elected Dean of the University of Georgia School of Pharmacy, a position he held continuously until 1945 when he reached retirement age and was made Dean Emeritus.

Dr. Wilson's pharmaceutical association work began with his election as president of the Georgia Pharmaceutical Association in 1911. After serving his term in office he continued to take an active part in the work of this association and in 1928 was named secretary of the Georgia Pharmaceutical Association, a position he held for 10 years. He was one of the founders of the Conference of State Pharmaceutical Association Secretaries. He was



ROBERT C. WILSON

elected vice-president of the American Association of Colleges of Pharmacy in 1933 and president in 1937.

Long active in the affairs of the AMERICAN PHARMACEUTICAL ASSOCIATION, Dr. Wilson has devoted a considerable portion of his time to developing better interprofessional relations. He was elected Chairman of the House of Delegates in 1936 and at the same time served as an ex-officio member of the A. PH. A. Council. Dr. Wilson was chairman of a special committee which organized a conference on professional relations with the American Medical Association in 1942 in connection with the adjourned meeting of the U. S. P. Convention.

At present, Dr. Wilson is serving as vice president of the 1940–1950 U. S. Pharmacopœial Convention.

(*Note:* To be made isotonic with blood serum. Volumes of water to be determined from Column A, Table I, Page 350.) The drugs are to be made into a solution using 13.3 cc. of distilled water and a sufficient amount of the diluting solution to make 60 cc.

Summary

A simplified method has been presented for use with diluting solutions in the preparation of isotonic and buffered prescriptions. Since calculations are minimized and are of a type with which pharmacists are familiar, it is believed that the use of diluting solutions may be encouraged.

A table is presented which shows the volume of water to be used in the preparation of one fluidounce of a one per cent solution of the drugs listed when used with any isotonic diluting solution.

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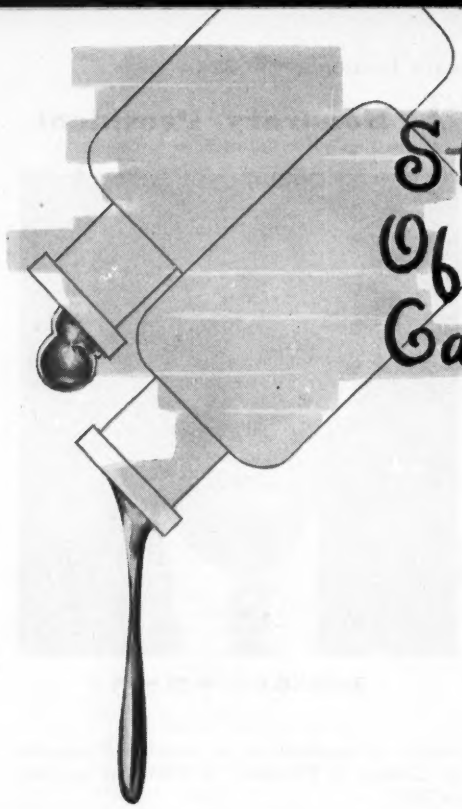

Should not the Official Formula of Calamine Lotion Be Revised?

by **LESLIE M. OHMART**
and **MITCHELL J. STOKLOSA***

THE consistency of Calamine Lotion varies within rather narrow limits depending upon the nature of the bentonite used but, if prepared with the full amount of bentonite magma prescribed in the official monograph, it usually is of such a thick consistency that users find it difficult or impossible to remove the lotion from the dispensing bottles. As a consequence of the many complaints concerning the official preparation, it has become common practice to reduce the proportion of bentonite magma in the recipe. Since there is no unanimity of opinion on the extent by which the bentonite magma should be reduced, the calamine lotions now being dispensed in hospitals and retail pharmacies vary considerably in appearance and consistency.

The present official monograph developed from attempts to prepare a calamine lotion in which the insoluble material would be permanently, or nearly permanently, suspended. The objective was realized in the present official recipe, there being little or no perceptible sedimentation of the insoluble material. It was realized, however, at the expense of the usefulness of the lotion. There seems little point in achieving permanent suspension if this results in immobilization of the lotion in the dispensing bottle.

In using suspending agents in the preparation of lotions, the pharmacist has two objectives: To insure that each portion removed from the container after agitating it will represent a reasonably accurate fraction of the whole, and to improve the appearance of the preparation by retarding sedimentation. Although it probably is true that, if any sedimentation occurs, it is impossible to obtain an accurate fraction under ordinary conditions, experience has shown that the inaccuracy seldom is significant.

This investigation has been undertaken to determine if the amount of bentonite magma in the official monograph for calamine lotion may be reduced without significantly decreasing the accuracy of the preparation under ordinary conditions of use; to determine the effect of such reduction upon the relative viscosity and rate of sedimentation; and to attempt to establish the optimum concentration of bentonite magma.

Experimental

Nine samples of calamine lotion were prepared. The formulas used in the preparation of the samples are shown in tabular form (Table I) on the opposite page.

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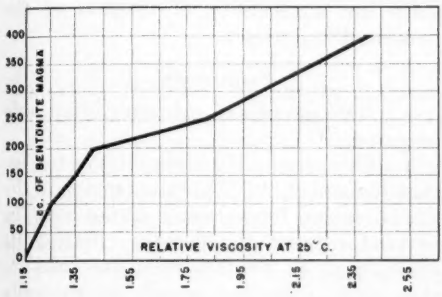
TABLE I

	Sample A	B	C	D	E	F	G	H	I	
Calamine	80	80	80	80	80	80	80	80	80	Gm.
Zinc Oxide	80	80	80	80	80	80	80	80	80	Gm.
Glycerin	20	20	20	20	20	20	20	20	20	cc.
Bentonite Magma	400	350	300	250	200	150	100	50	0	cc.
Calcium Hydroxide Solution, *q. s.*, to make	1000	1000	1000	1000	1000	1000	1000	1000	1000	cc.

The U. S. P. XIII directions for preparing Calamine Lotion were followed in compounding samples A through H. Sample I was prepared according to the directions given in the N. F. VI monograph on Calamine Lotion.

Fig. 1



Graph showing the effect of the amount of bentonite magma upon relative viscosity.

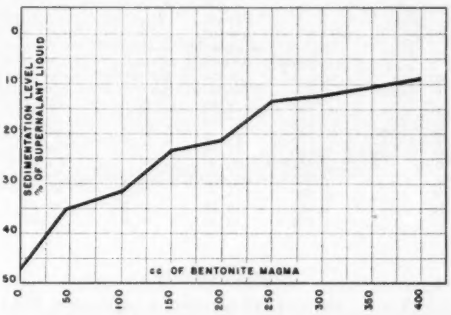
The relative viscosity of the samples was determined by means of a 50-cc. pipette standardized with distilled water at 25° C. The quotient obtained by dividing the time, in seconds, required for the level of the sample to fall from the upper to the lower calibration mark on the pipette by the time, in seconds, for the distilled water represents the relative viscosity. Distilled water at 25° C. was taken as 1. The results of the viscosity determinations are shown in Table II and Fig. 1.

TABLE II

Sample	Relative Viscosity
A	2.4
B	2.2
C	2.0
D	1.8
E	1.4
F	1.35
G	1.25
H	1.2
I	1.15

To determine the effect of reduced amounts of bentonite magma upon the rate of sedimentation, a 100-cc. portion of each sample was allowed to stand in a 100-cc. graduated cylinder, and the degree of separation of the supernatant liquid was observed. The results of the sedimentation tests are shown in Table III and Fig. 2. The sedimentation level represents the amount of the supernatant liquid expressed in terms of percentage of the 100-cc. column of the sample.

Fig. 2



Graph showing the effect of reduced amounts of bentonite magma upon the sedimentation level after standing for 14 days.

TABLE III

Sedimentation level. The amount of the supernatant liquid after standing for the designated time

Sample	Time 15 min.	45 min.	2 hrs.	20 hrs.	1 wk.	2 wks.
A	neg.	neg.	neg.	5%	10%	10%
B	neg.	v. sl.	sl.	7%	11%	11%
C	neg.	sl.	1%	10%	13%	13%
D	neg.	1%	1%	12%	14%	14%
E	1%	2%	2%	20%	21%	22%
F	1%	5%	8%	24%	24%	24%
G	2%	5%	9%	32%	32%	32%
H	2%	5%	10%	35%	35%	35%
I	3%	5%	11%	45%	46%	47%

Neg.—negligible; v. sl.—very slight; sl.—slight.

It will be noted from the results in Table III that the rate of sedimentation is not significantly affected when the amount of bentonite magma is reduced from 400 cc. (sample A) to 250 cc. (sample D).

In order to discover if the amount of bentonite magma may be reduced without significantly decreasing the accuracy of the preparation under ordinary conditions of use, a 10-cc. portion of each sample was removed from a dispensing bottle after agitating it,

and the amount of insoluble material in the fraction was determined. The fraction withdrawn from the dispensing container was transferred to a tared filter paper; the residue on the filter was washed repeatedly with distilled water and then dried to constant weight at 100° C. The results of these experiments are shown in Table IV.

TABLE IV

Sample	Gm. of insoluble material in 10 cc.	Per cent (w/v) of insoluble material in the fraction	Per cent (w/v) (theoretical) of insoluble material in the fraction	Per cent of theoretical amount in the fraction
A	1.787	17.87	18.0	99.28
B	1.768	17.68	17.75	99.61
C	1.728	17.28	17.5	98.74
D	1.668	16.68	17.25	96.70
E	1.687	16.87	17.0	99.24
F	1.626	16.26	16.75	97.08
G	1.600	16.00	16.50	96.97
H	1.614	16.14	16.25	99.32
I	1.550	15.50	16.0	96.88

Conclusions

The experimental evidence indicates that the amount of bentonite magma used in the preparation of calamine lotion has little or no effect upon the accuracy with which the lotion may be employed under ordinary conditions of use. The experimental lotion containing no bentonite magma gave an accuracy well within accepted limits and differed from that containing the official quantity of bentonite magma by less than 2.5%.

The amount of bentonite magma in the official recipe for calamine lotion may be reduced from 400 cc. to 250 cc. without significantly affecting the sedimentation rate of the product. The relative viscosity of the lotion made with 250 cc. of bentonite magma is such that it may be removed from the typical dispensing bottle without difficulty.

Because the experimental evidence indicates that the amount of bentonite magma in the official recipe for calamine lotion may be reduced without significantly affecting its accuracy or its sedimentation rate and because such reduction would satisfactorily adjust the viscosity and thus make unnecessary the unilateral adjustment now common practice, it is recommended that the Pharmacopœial Revision Committee consider the advisability of revision of the present official recipe.

Summary

1. Nine samples of calamine lotion were prepared.

2. Experimental evidence indicates (*a*) that the amount of bentonite magma in the official recipe for calamine lotion may be reduced without significantly affecting its accuracy or its sedimentation rate and (*b*) that such reduction would satisfactorily adjust its viscosity.

3. It is recommended that the Pharmacopœial Revision Committee consider the advisability of revision of the present official recipe for calamine lotion.

Pharmacists on Overseas Mission to Germany

Dr. Martin S. Ulan of Rutgers University, Dr. Albert M. Mattocks of Western Reserve University, and Dr. Leroy C. Keagle of the University of Buffalo have been named as members of the Unitarian Service Committee's overseas mission to conduct refresher courses in Germany for displaced pharmacists. All three are professors of pharmacy at their respective universities. They will leave New York City about July 1 and will return around September 1.

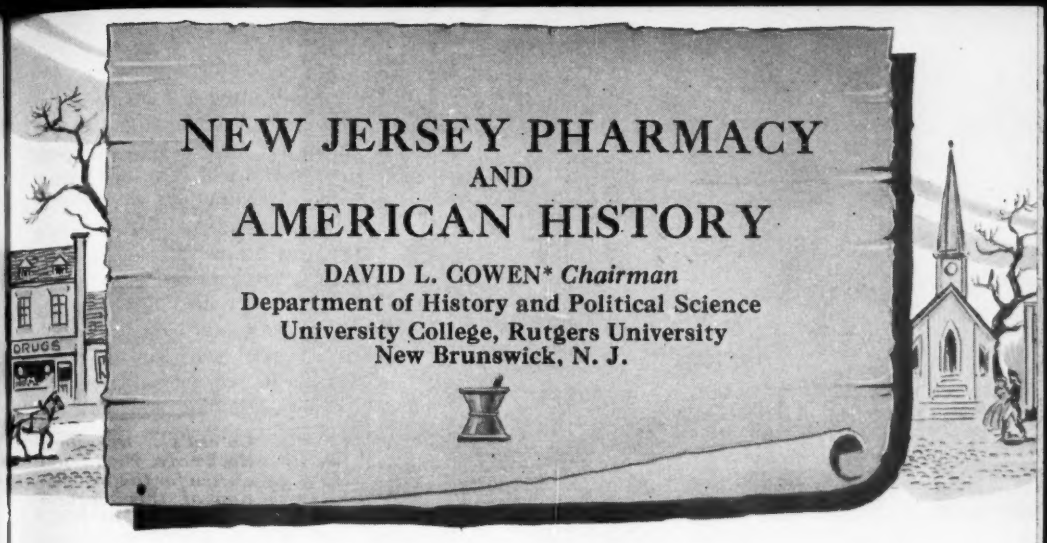
Drs. Ulan, Mattocks and Keagle will join a group of nine physicians and dentists during the eight-week period of the mission. Headquarters for the group will be Munich, Germany. The mission will be under the direction of Dr. Benjamin Kramer, professor of clinical pediatrics at Long Island College of Medicine.

The physicians, dentists and pharmacists plan to conduct refresher courses for 150 displaced physicians, 100 dentists, and 60 pharmacists. The pharmacy professors will use the facilities of the School of Pharmacy at the University of Munich for their phase of the mission's work.

Samuel C. Henry Dies

Samuel C. Henry, Life Member of the AMERICAN PHARMACEUTICAL ASSOCIATION and former Executive Secretary of the National Association of Retail Druggists, passed away Friday, April 22, at his home in Chicago at the age of 80 years. Mr. Henry formerly operated retail pharmacies in the city of Philadelphia and served as President of the N.A.R.D. in 1914–15.

In 1917 he was elected Secretary of the N.A.R.D. and served continuously until 1933 when he was succeeded by the present Secretary, John W. Dargavel. During his many years of service to the profession of pharmacy Mr. Henry worked closely with the officers of the AMERICAN PHARMACEUTICAL ASSOCIATION. President Roosevelt appointed him to the National Recovery Administration Review Board during the period N.R.A. was in effect.



NEW JERSEY PHARMACY AND AMERICAN HISTORY

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IN NEW JERSEY the history of pharmacy is fortunate in having 78 years of records in the *Proceedings* and the *Journal* of the New Jersey Pharmaceutical Association, the State pharmaceutical association with the longest continuous existence. It is my opinion that these records do more than recite the history of the Association; they present historical evidence of basic tendencies in American life. The history of the United States is to be found in microcosm, in the history of the New Jersey Pharmaceutical Association.

Decline of *Laissez Faire*

Thus, the founding of the Association in 1870, to accomplish, among other purposes, the restriction of the dispensing and sale of medicines to regularly educated druggists and apothecaries,[1] was a symbol of a vanishing America. A maturing economy and social organization, existing within frontiers rapidly reaching their limits, was forcing the rugged individualism of pre-Civil War days into obsolescence.

I do not know of any better historical evidence of this than in the history of pharmaceutical (and medical) legislation in this country. Prior to the Civil War, only Louisiana, South Carolina, Georgia, and Alabama had state-wide laws requiring the examination and licensing of pharmacists.[2] (New York[3] and Mississippi[4] had laws covering New York City and Adams County, respectively.) Only in Louisiana was there any considerable enforcement.[5] In 1836 a speaker before the Maryland Academy of Science and Literature explained this condition on the basis of the self-regulating qualities of a competitive economic system,[6] and, in 1844, the *New Orleans Medical Journal* pointed out that it was the right of the individual to "follow whatever occupation or profession most congenial to his own feelings."[7] Moreover, the public would soon learn to distinguish the competent from the incompetent practitioner.[8]

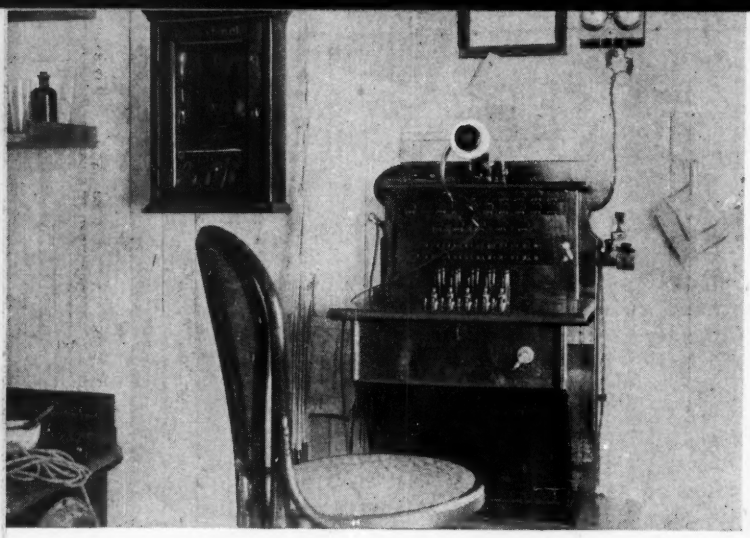
Finally, the same faith in a rugged individualism, as Dr. George Urdang has pointed out,[9] was still present when the AMERICAN PHARMACEUTICAL ASSOCIATION undertook to sponsor regulatory legislation in 1867.

The desire of the American and the New Jersey Pharmaceutical Associations for governmental regulations did not immediately effect a change in this attitude of extreme individualism. It took the New Jersey Association until 1877 to get the Legislature to pass the first licensing law.[10] By that time at least six other States had passed similar laws and by the end of the decade another State and the District of Columbia had joined their ranks.[11] In the 80's, 23 States and territories passed such laws and by 1904 they were virtually nation-wide.[12]

Nationalization of Business

A second tendency in American life illustrated by the history of pharmacy was the fruitless struggle of the profession against big business, mass production, and national

* Delivered at the April, 1948, meeting of the Northern New Jersey A.PH.A Branch.



*Gerard's Drugstore, Rockaway, N. J., was chosen for the installation of this magneto switchboard in 1901.**

distribution. To the pharmacist who longed for professionalism and lamented the inexorable economic forces that made of him a retail merchant, this "nationalization" of business was a cruel blow. Patents and proprietaries were old stuff to him, but "brazen advertising," to quote an 1875 comment, "forced" these products onto the pharmacists' shelves, where they "became dead stock on account of the fickle and fleeting saleability."

The first reaction to this problem (in the 1870's and 1880's) was encouragement to the pharmacists to make their own preparations, to deprecate the use of proprietaries, and to influence physicians to write individual prescriptions. In fact, the Association felt so keenly on the subject that at times in the 1880's and 1890's it excluded proprietaries from its exhibits.

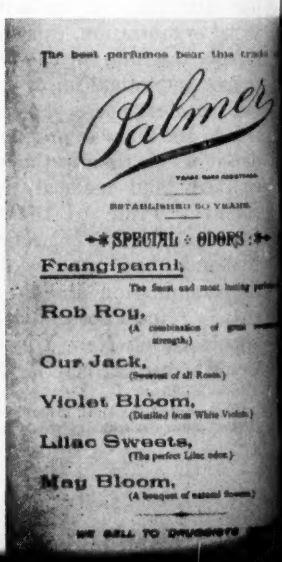
But pharmacy was caught in the backwash of economic trends; it could not hope to stop the big business in pharmaceuticals. It could not hope to change the patent system, check the tremendous growth of advertising, or stop the inroads of the medical detail man. Pharmacy had to fall in line, and by 1898 the President of the New Jersey Pharmaceutical Association had to admit that patents and proprietaries were a "large part" of the drug business. Provocation with proprietaries never ended, however. Small profit margins, inferior products, adulteration, innumerable varieties, branding of common and official remedies, "free goods," and chain store, department store, five-and-ten-cent store, and grocery store sales, continued to plague the pharmacists.

Again organized pharmacy resorted to social action, seeking relief in legislation. As early as 1879 a suggestion was made that the New Jersey Association sponsor legal restrictions on the manufacture and sale of proprietary remedies. Finally, years of effort produced the Robinson-Patman and Miller-Tydings Acts of 1936–1937 and the State Fair Trade Act of 1935, legislation intending to deal with the problem child of proprietaries—price-cutting.

Progressive Reform

A third tendency in American life for which specific illustrations are to be found in the history of pharmacy in New Jersey, was

* Photographs courtesy New Jersey Bell Telephone Co.



A comparison with present perfume names is illuminating.

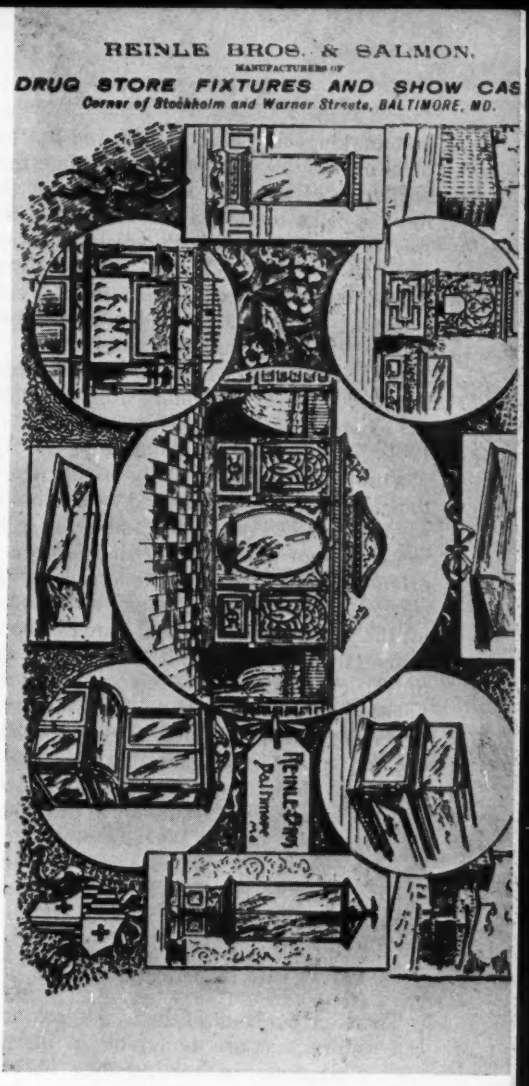
the new concern with the general welfare that was part of the Progressive Movement preceding World War I. This concern involved the need to protect the public, not merely from the ravages of monopoly, but particularly from the predatory activities of unscrupulous business men. It touched pharmacy at three points: narcotics, poisons and the adulteration of drugs.

Thus, in 1904 and 1908, at the behest of police officials, New Jersey passed laws prohibiting the sale, first of cocaine, and then also of eucaine, opium, morphine, and chloral, except on prescription. The act required the keeping of a register of such prescriptions—a type of regulation that pharmacists were not too happy about. The New Jersey Association feared that if such laws were "literally enforced [they] would work great harm to our business." In 1909, however, the Association admitted that the law was "working well and generally satisfactory," and took no further steps in the matter.

In 1913 the Association became concerned with this type of government regulation, on the federal plane, when the Harrison Narcotic Act was under consideration. A delegate was sent to the National Drug Trade Conference, and this conference had some success in having modified certain rather severe portions of that bill.

In 1915 the Association succeeded in getting a State law passed that conformed with the federal law, an activity that brought forth the commendation of the press.

The Association's attitude toward poison legislation went through similar stages. An


REINLE BROS. & SALMON.
MANUFACTURERS OF
DRUG STORE FIXTURES AND SHOW CAS
Corner of Stockholm and Warner Streets, BALTIMORE, MD.

An early advertisement of fixtures and show cases.

1898 attempt to regulate the sale of poisons went relatively unnoticed, and in 1903 the Association had "consigned to sleep" a law requiring the keeping of a poison register. Yet it recognized its responsibility and waged an effective campaign to have the newspapers refrain from mentioning the names of poisons and their doses in murder and suicide stories. The problem was apparently a serious one, for it elicited considerable discussion at Association meetings. Frequently, suggestions were made concerning the desirability of distinctive shapes

*Photograph of bottle made for R. W. Willard's Telephone Drugstore, Haddonfield, N. J. Haddonfield's first telephone was installed in Willard's Drugstore in 1883.**

* Photographs courtesy New Jersey Bell Telephone Co.

and markings for poison tablets and bottles, perhaps the most appropriate being that bichloride of mercury be sold only in the form of coffin-shaped tablets. By 1918 the Association was aware that self-education was not sufficient. Its Legislative Committee sought the enactment of the now customary poison label and register laws, and in 1919 the Legislature complied.

In the matter of the adulteration of drugs, the Association seemed more willing to have the cooperation of the Government. In 1904 the Legislative Committee of the Association mentioned casually in its report that there had been presented "a number of what is called Pure Food and Drug Bills which did not affect the Pharmacist to any extent." This apparent unawareness of current trends was soon dispelled, however, for the passage of the Federal Pure Food and Drug Law, in 1906, with "the hearty approval of the drug trade of this State," led the Legislative Committee to take the initiative in seeking corollary State legislation. The Committee arranged a meeting with representatives of the Medical Society and of the State Board of Health, and out of this meeting eventually came (1907) a State Pure Food and Drug Act, composed, in the main, by the Board of Health with the assistance of the Attorney General.

Life in America

These are but some of the trends in American history that are discernible in the history of pharmacy in New Jersey. There is much more that could be described: The nationalism of the Spanish-American War period, the shortages of World War I, the corruptive influence of prohibition, the resort to government assistance in the days of the depression, the complete mobilization of all resources in World War II, all are reflected in the history of New Jersey pharmacy.

It is, however, in that field of history known as social history that New Jersey pharmaceutical history has most to offer. Social history is concerned not with major economic and political trends and events, but with the minutiae of life, with the customs, habits, and amenities of daily living.

For example, there is ample suggestion in the records of the Association that the pharmacist knows as much, if not more, of the intimate details of the morals of the average American than the physician, the sociologist, or the clergyman. The popular biography by Robert B. Nixon called *The Corner Druggist*[13] is replete with episodes involving the furtive search for contraceptives or emmenagogues, but Nixon's best literary efforts cannot compare with the vivid, witty and deadly earnest comments of Howard P. Reynolds to the Association in 1887. Only occasionally were there such castigations of the pharmacist for the lightness with which he took his ethical responsibilities in such matters, an irresponsibility in itself indicative of American morals. Yet it must be noted that these indications of personal habits do not permit sweeping generalizations concerning the morality or immorality of the American public.

American Travel Habits

Other facets of American life are discernible in the history of the Association. American travel habits—and the novelty at the turn of the century of what is now commonplace—can be traced in the Association's records. Thus coach rides (in 1887), trolley rides (in 1903), bus rides (in 1905), and auto rides (in 1908) were special treats arranged for the entertainment of the members and their wives at conventions. In 1922, the Association was advised that since "the jitney is coming on . . . traction company stocks are not the most desirable to hold."

The matter of entertainment at Association conventions brings up certain other interesting details of American life. Thus, it would appear that euchre was the fashionable card game until about 1909, and that the ladies were great devotees of the game. In 1909 whist is mentioned for the first time, and whist, of course, was the forerunner of auction bridge.

Dancing, too, was a diversion at the conventions. In 1874 the New Jersey pharmacists and their wives danced "the labyrinthine mazes of the mazourka and quadrille." In 1882 they partook of the "seductive pleasures of the waltz and the light quadrille." By 1918, however, there were indications of a radical change, for in that year dancing was to a "jazz band, 'imported' from New York."

A third diversion of such conventions was audio-visual attractions. The Association went through the whole gamut of such entertainment. In 1885 the guests were

enthralled with an illustrated lecture called "Around the World in Ninety Minutes," using an "oxy-hydrogen lantern." In 1911 moving pictures were mentioned for the first time, and in 1931 "moving-talking" pictures.[14] It is interesting that both of these were advertising ventures—the silent by Heinz and the sound by Coca Cola.

The records of the Association are indicative also of the changing status of women in American life, of her greater independence and assertiveness, and of her participation in professional activities. Thus in 1902 a Mrs. A. M. Griffing of South Orange became the first woman proposed for membership in the New Jersey Pharmaceutical Association and, with a gallantry befitting the occasion, the membership accepted her with a rising vote. Early in this century, too, women became actively interested in a campaign against offensive medical advertising. These activities proved effective, and in 1915 Fred B. Kilmer, long a leader in New Jersey pharmacy, credited the ladies with being largely responsible, not only for the disappearance of obnoxious advertising, but also for shorter hours, Sunday closing, pure food and drug laws, and the improvement in the appearance, morals, and "spirit" of the drugstore. Perhaps the best indication of the new freedom of the weaker sex, however (and a good indication of changing customs), is to be found in this statement made by the late Mr. Sherwin in 1920: "Who would have thought ten years ago that we would today find every woman using a little rouge, even if they are church people, and lots of women even buying hair nets by the dozen?"

Story of the Telephone

One of the most interesting bits of social history to be found in the records of the New Jersey Pharmaceutical Association is the story of the telephone. An outstanding American social historian has pointed out that by 1900 there were already 800,000 telephones, that is about one for each 95 persons, as compared with one for each 923 persons in 1880.[15] It is my belief that this is misleading, as cold statistics frequently are. The telephone was not a very common thing among private users in the early 1900's and some day the corner store, the drugstore especially, will get its full share of credit for the work it did in providing access to a telephone, and popularizing it. The druggist of the period hardly recognized the social role he was playing, he was too concerned about the time it took to call a neighbor—and neighbors might be blocks away—to the phone. Not all the pharmacists were able to sustain a system of fees for such services. One enterprising man, however, who contended that half his porter's time was consumed in calling people to the phone, charged 5 cents if the person lived within one block and 10 cents if he lived beyond. The pharmacist was concerned, too, with the many times he phoned a doctor without remuneration, and the many times a customer might use the phone and neglect to pay for it. For these reasons most pharmacists welcomed the arrival, about 1907, of the "automatics" as the coin telephones were called, although since commissions were cut (from 20% to 10%) at the same time, the new devices were something of a mixed blessing. Perhaps there is no better proof of the tremendous importance of the drugstore telephone than the fact that in Philadelphia—where, to the chagrin of New Jerseyites, commissions were 25–33$^1/_3$%—765 drugstores earned $25,000 a year (1909–1910) in commissions in aggregate. But commissions were not the only reason for the pharmacists' interest in automatics. In 1910 one commentator said:

> "I deprecate profanity, and on that account I advocate slot machines, simply for their purifying remedial properties. With the old line telephones I have heard more sulphurous invocations in pharmacies than can ever be expected in Dante's Inferno. Introduce fireproof, soundproof booths with the pay telephones, and... the drugstore atmosphere changes to the environment of one of Moody and Sanky's revival meetings."

Conclusion

In conclusion, I should like to refer briefly to several additional amenities of American life illustrated by the history of pharmacy. In 1887 it was considered noteworthy for the *Proceedings* to record that halls (at the Paterson meeting place) were "brilliantly lighted with electricity." In 1893 the increasing popularity of the cigarette evoked the bitter condemnation by August Drescher,

a founder of and at that time a professor at the New Jersey College of Pharmacy: "This curse of our age," he called the cigarette, "How many promising talents *in the young*, how many really bright and accomplished minds *in the riper age of manhood* are narcotized into the depths of lunacy—even death—daily and annually by these fiendish little devils, the *sale* of which is now something enormous." Drescher himself, it is hard to believe, was an inveterate cigar smoker.

In 1900 the New Jersey delegates reported that the last meeting of the AMERICAN PHARMACEUTICAL ASSOCIATION had begun, at Put-in-Bay, Ohio, at 3:45 standard time. The term "standard time" was apparently strange to the New Jerseyites, because they followed it with the explanation, "as they say out there." In 1911, the Association refused to endorse the new "Parcels Post" that the federal government had embarked upon a few years earlier. They believed it rather socialistic and inimical to the interests of the retailer, and of value chiefly to mail order houses. But essentially because of its greater convenience in buying, the Association within two years had dropped its animosity. About this time, too, the drug trade was popularizing the safety razor, after the cutlery trade had failed to put it over. Mr. Kilmer called the result "one of the modern marvels," and truly its effect on the habits and appearance of the American male is inestimable.

In 1912, a Doctor Lane broached a new idea to the Association when he suggested the use of paper towels as a sanitary measure. He also "had thought some of introducing sanitary paper cups only that the appearance was not up to the old style of a clean glass." By 1916 some of this antipathy had worn away and there was open encouragement given to the use of paper cups at soda fountains.

There is probably a great deal more of such material to be found in the archives of pharmacy, and perhaps some day the general historian will recognize these archives as a fruitful source of historical evidence.

REFERENCES

Note: With the exception of the references given below, the material in this article is derived from the annual *Proceedings* of the New Jersey Pharmaceutical Association. A date cited in the text of the article usually designates the year of the *Proceedings* which was the source of the particular item.

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3. *Ibid.*
4. D. L. Cowen, "Louisiana, Pioneer in the Regulation of Pharmacy," *Louisiana Historical Quarterly*, **26**, 332(April, 1943).
5. *Ibid.*, and D. L. Cowen, "A Roster of the Licensed Apothecaries of Louisiana, 1816–1847," *Journal of the New Orleans College of Pharmacy*, **8**, 3, 20(Aug., 1943).
6. "America's First Pharmacy Laws," *loc. cit.*, p. 217.
7. May, 1844, p. 82.
8. "America's First Pharmacy Laws," *loc. cit.*, p. 217.
9. G. Urdang, "Development of Modern Pharmacy in the United States," *Merck Report*, **56** (4), 6(Oct., 1947).
10. "The New Jersey Pharmaceutical Association 1870-1945," *loc. cit.*, p. 21.
11. E. Kremers and G. Urdang, "History of Pharmacy," Lippincott, Philadelphia, 1940, p. 200. Three states, Alabama, Georgia, and South Carolina, had laws carrying over from before 1870, although South Carolina is here included in the seven States that passed such laws in the 1870's. Cf. Cowen, "America's First Pharmacy Laws," *loc. cit.*, May, 1942, p. 162.
12. According to Kremer's and Urdang's list (pp. 200–201) only Maryland and Arkansas had no laws by 1904.
13. Prentice Hall, New York, 1941.
14. *The New Jersey Journal of Pharmacy*, **4** (6), 10(June, 1931).
15. A. M. Schlesinger, "The Rise of the City," Macmillan, New York, 1933, p. 96.

JOSEPH J. HAMMER DIES

Joseph J. Hammer, attorney for the New York State Pharmaceutical Association since 1929 and an authority on pharmaceutical law, died suddenly of a heart attack on April 1 in Orlando, Florida. A graduate of Fordham University College of Pharmacy, he later studied law at Fordham Law School and was admitted to practice in New York State.

DEATH TAKES J. E. HANCOCK

James E. Hancock, 87, former president of the Baltimore Drug Exchange and a life member of the AMERICAN PHARMACEUTICAL ASSOCIATION, died on May 29.

Mr. Hancock, who was proprietor of John F. Hancock and Son, pharmaceutical manufacturers, came from an old Maryland family. He was born in Baltimore and attended the University of Maryland.

Pharmacy in Turkey

The A. PH. A. library has received a copy of *The Pharmaceutical Almanac of Turkey*, 1949 edition, edited by Remzi Kocaer, Turkish pharmacist. The volume may be obtained by addressing Mr. Kocaer, Sark Merkez Ecza Deposu, Adaban, Sirkeci, Istanbul, Turkey—the price being $5.00

Although the volume is printed in Turkish, a section in English is included which may meet the needs of Ameridan pharmacists who desire information concerning pharmacy in Turkey. This section includes material on the history of pharmacy in Turkey, pharmacy in the former Turkish courts, the progress and development of pharmacy during the present republic, the pharmaceutical laws of Turkey, and the Pharmaceutical Association of Turkey.

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ENVIRONMENTAL CANCER

No. 12 in a Series

◆ ◆ ◆ ◆ ◆ ◆ ◆

THE definite discovery of some factors in the human environment which cause cancer is as a ray of light in the darkness of cancer research. The cause of less than 1% of all cancer is so far known, and it cannot be assumed that all cancers will be found to have their causes in the environment.

The pharmacist will be especially interested, for many carcinogenic agents so far identified are chemicals with which he is familiar. Others may concern the habits or industrial occupations of his clients. They may come to him seeking remedies for supposedly local conditions which in reality may be symptoms of cancer.

Excessive exposure to intense sunlight may, with some people, lead to skin cancer. Skin cancers are four to five times more frequent in Dallas and New Orleans, for example, than in Pittsburgh or Detroit. Fortunately, skin cancer gives early warning and is curable in its early stages. (See Article 9 in this series; March, 1949, issue THIS JOURNAL.)

The mining, manufacture and use of radioactive materials and the use of x-ray apparatus have been known to cause cancer. One of the most famous discoveries, made years ago, was the case of the luminous dial painters in watch factories. Out of 200 persons in that industry, a score have died of cancer and probably more will die.

Pharmacists may wish to caution clients who ask their advice. Indiscriminate use of x-ray machines in shoe-stores, for example, may carry cancer hazard to the exposed tissues. In some cases the injudicious use of x-ray by the medically untrained for removal of hair has actually caused cancer.

Medicinal preparations containing arsenicals and coal tar have been known to cause skin cancer, when used to an excessive degree over prolonged periods. An abnormally high arsenic content in drinking water has caused cancer of the skin and of the internal organs.

Other proved carcinogenic agents found in the occupational environment include such metallic compounds as chromates and nickel carbonyl, and various dye intermediaries. In some of the industries using these compounds and chemicals, precautionary steps have already been taken. Certain dye plants, for instance, have been designed to eliminate the worker's contact with betanaphthylamine.

In recent years there has been an apparent rapid increase of cancer of the respiratory system among men. (See Articles 2 and 11 in this series; August, 1948, and May, 1949, issues THIS JOURNAL, respectively.) From 1930 to 1944 the death rate from such cancers in men has almost tripled. The causes are not definitely known, but lung cancer has been caused under certain conditions by the inhaling of a number of industrial carcinogens, such as radioactive ores, arsenicals, chromium compounds, tar fumes, and nickel carbonyl.

Environmental cancer deserves study not only by scientists but by management and labor, public officials, and the whole nation.

The pharmacist, with his professional training, his knowledge of local industrial conditions and living habits, and his close contact with the public, is in a position to contribute usefully to this broadening study.

Fluid Solubles vs. Official Standards

*by IGNATIUS J. BELLAFIORE**

FLUID solubles are liquids offered by pharmaceutical manufacturers for rapidly preparing certain galenicals whose official mode of preparation is time-consuming or impractical on a small scale. Two popular solubles are fluid tolu soluble and fluid rose soluble for preparing syrup of tolu balsam and rose water, respectively.

These two solubles do not prepare products that meet official standards.

Remington[1] states "rose water is sometimes prepared extemporaneously from concentrates or from oil of rose, but such water is not official and rarely compares favorably with the fresh distillate from rose petals."

Lyman[2] more recently writes "A large proportion of the rose water in general use is not prepared from the official stronger Rose Water as the Pharmacopœia directs but is made by diluting a specially prepared solution of 50% alcohol and oil of rose or rose synthetic. Neither of these artificial substitutes compares in quality with the official products."

Luck[3] found that fluid tolu solubles were of a very poor grade and described the syrup of tolu balsam prepared from them as a colorless, inspid liquid, decidedly inferior in odor and taste to that made by the official process. The pharmacopœial syrup is prepared with tincture of tolu balsam and magnesium carbonate; it is yellow and highly aromatic.

In order to determine the extent of use of fluid solubles in New York City, two of the largest national manufacturers of pharmaceuticals and three local jobbers were contacted.

Both manufacturers replied that their methods of distribution made it difficult to supply exact statistical data.

Manufacturer A stated that "We believe it can be said that solubles generally are quite popular, although we do know that standard U. S. P. products are also sold. From the writer's experience, we believe that the weight of the evidence would be in favor of the solubles; however, there are no doubt sections of the country where the reverse might be true."

Manufacturer B reported a sale of limited amounts of both Fluid Tolu Soluble and Syrup of Tolu Balsam, U. S. P. He does not supply Stronger Rose Water, U. S. P., but reported a fair sales volume of Fluid Rose Soluble.

Table I was prepared from figures supplied by the jobbers. One part of fluid rose soluble makes 33 parts of artificial rose water, so this factor was used to determine the number of gallons of artificial rose water listed. Since one part of fluid tolu soluble represents about 12 parts of Imitation Syrup of Tolu Balsam, the figures for this item were computed in the same way. Stronger Rose Water, U. S. P., diluted to half-strength, gave the figure for the official Rose Water. All figures are sales for one year.

Products prepared from fluid solubles have little or no price advantage over the official products. When stronger rose water is purchased in small quantities, one pint of Rose Water, U. S. P., can be prepared for $0.23; one gallon of the official rose water costs $1.20. The corresponding quantities of artificial rose water prepared from the fluid soluble and distilled water cost $0.16 and $1.20, respectively.

Official Syrup of Tolu Balsam can be purchased at $0.72 per pint and $3.84 per gallon. The corresponding prices for an imitation syrup of tolu balsam prepared from fluid tolu soluble and rock candy syrup are $0.41 and $3.25.

The economic factor is of importance, however, in that the official products spoil over a period of a few months whereas the fluid solubles, due to their high alcoholic content, are stable indefinitely. Thus it is clear that many pharmacists faced with the problem of choosing either a high-grade official product which may deteriorate or a

* Associate Professor of Pharmacy, St. John's University, College of Pharmacy, Brooklyn, N. Y.

TABLE I*

Comparative Sales of Official and Unofficial Products

	Official Rose Water	Artificial Rose Water	Percentage of Total Represented by Artificial Product	Official Syrup of Tolu Balsam	Imitation Syrup of Tolu Balsam	Percentage of Total Represented by Imitation Product
Jobber C.....	72	264	78.5	307	100.5	24.6
Jobber D.....	..	...	...	451	252	35.8
Jobber E.....	0	12.3	100.0	1	28.5	96.6

* Quantities are given in gallons.

poor-grade unofficial product which is stable, select the unofficial product to be on the safe side financially.

If many pharmacists are ignoring the official standards for these two products, it may be possible that the standards, while ideal, are not entirely realistic. They may represent theoretically excellent products which, in actual practice, are often not acceptable because of their tendency to spoil.

Lyman[4] reports that the *British Pharmaceutical Codex*, 1934, gives a formula for a solution of tolu which is used like fluid tolu soluble, i.e., it is added to simple syrup. It is described as yielding a syrup of tolu with good aromatic qualities. The solution of tolu keeps better than the syrup of tolu since it contains 30% alcohol.

It is suggested that the *United States Pharmacopœia*, in addition to its present standard for syrup of tolu balsam, consider an alternate formula using a high-quality fluid soluble patterned after the British formula. In the same way the *Pharmacopoeia* might develop a standard for a superior fluid rose soluble that could be used by pharmacists who prefer it to the present distilled product.

While more complete data than are above presented are needed to establish positively the relative use of official and unofficial standards, it seems desirable that the standards for these two products be re-evaluated.

TEACHERS WANTED

A **Ph. D. in Pharmacy** to head our Pharmacy Department, and a **Ph. D. in Chemistry,** preferably in Pharmaceutical Chemistry, to head our Chemistry Department. Salary $5500 to $6000.

Also an **instructor in Chemistry.**

Please send a copy of college transcript and photograph, stating age and experience.

Dean Constantine N. Meriano
New England College of Pharmacy
Corner of Pinckney and Anderson Streets
Boston 14, Massachusetts

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Surgery for Heart Disease

Surgery to stop the great killer, coronary heart disease, has been announced by Dr. Claude S. Beck, Western Reserve School of Medicine. The operation consists of creating a new artery leading off the aorta. It is the first time an artery has been created leading from this main artery of the body.

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INFORMATION SERVICE

Members of the American Pharmaceutical Association are invited to submit their professional problems to the Journal, 2215 Constitution Ave., N. W., Washington 7, D. C., giving all pertinent details. Advisory service is provided by the A. Ph. A. library and technical staff and the Journal panel of technical consultants.

SOURCES OF STRYCHNINE NITRATE

Since reporting in the April, 1949, issue of THIS JOURNAL that we were unable to locate a source of supply of strychnine nitrate, we have been informed that the New York Quinine and Chemical Works, Inc., Brooklyn 11, N. Y., recently has added strychnine nitrate to their production schedule. The product also is listed in the chemical catalogue of the Eimer and Amend-Fisher Scientific Co., 635 Greenwich St., New York 14, N. Y.

DDT

Can you mail me material on DDT?—L. D., Massachusetts

We are enclosing a booklet entitled "Toxicity and Potential Dangers of Aerosols, Mists, and Dusting Powders containing DDT," which is a reprint from Public Health Reports. This booklet does not include recent information which has developed during the past several months relating to toxicity and potential dangers of DDT. The Food and Drug Administration is presently giving attention to the problem of DDT and within the next few weeks may have available a publication in which more recent information will be summarized.

NORISODRINE SULFATE

Please send any information as to source, use, etc., on Norisodrine Sulfate.—M. G., Illinois

The only reference to Norisodrine Sulfate we have been able to locate is entitled "The Inhalation of Norisodrine Sulfate Dust," by Krasno, Grossman, and Ivy, which was published in the October 29, 1948, issue of *Science*. In a footnote to this article it is stated that the product was furnished by the Abbott Laboratories, North Chicago, Ill. We suggest that you communicate with the Abbott Laboratories concerning the present status of this drug.

GENTISIC ACID

Where may I obtain gentisic acid?—G. T., Washington

Gentisic acid is available for experimental use only from the Monsanto Chemical Co., St. Louis, Mo.

INSECT REPELLENT FORMULA

During the war a number of insect repellents were developed. Can you advise as to which were considered best?—M. B., New York

A number of formulas have been developed for insect repellents, most of which use the same basic ingredients. A typical formula is one which consists of the following:

Dimethylphthalate	3 parts by weight
Indalone	1 part by weight
Rutgers 612	1 part by weight

The Bureau of Entomology and Plant Quarantine, U. S. Department of Agricul-

ture, Washington 25, D. C., will send you on request a pamphlet listing the formulas preferred, and their uses.

ALEUDRIN

Can you supply any information on "Aleudrin," a nasal spray used to alleviate symptoms of asthma?—T. Z., Ohio

Aleudrin was developed in Germany and distributed in that country before it became available in the United States. The hydrochloride of the product is supplied by Winthrop-Stearns, Inc., 33 Riverside Ave., Rensselaer, N. Y., under the trade-mark name "Isuprel Hydrochloride" in a 1 in 200 solution. It is described by this company as a potent bronchodilator similar to epinephrine, but less disturbing to patients with high blood pressure; not subject to "fastness"; and with a wider margin of safety. It is recommended for use in the symptomatic relief of bronchial asthma.

Rh BLOOD FACTOR

We have recently received queries concerning the Rh factor as it affects the newborn. Can you cite us an article of general interest on this subject?—A. R., New York

An article of the type that we believe will supply the information you want was published in the Merck Report in April, 1946. In the event you do not have this number in your files it is possible that you could obtain a duplicate by writing to Merck and Co., Inc., Rahway, N. J.

ESTROGENIC SUBSTANCES

Can you supply information on, and source of supply of lyophilized estrogenic materials? —S. Z., Ohio

Estrogenic substances may be obtained in bulk for manufacturing purposes from a number of different sources. Among these are Fine Chemical Co., 156 E. 42nd St., New York 17, N. Y.; the Wimpole Chemical Laboratories, Inc., 158 W. 27th St., New York 1, N. Y.; and the Hema Drug Co., 66-38 Clinton Ave., Maspeth, N. Y. In addition to these sources, the Wilson Labora-

(Continued on Page 382)

As appearing in current Medical Journals

IODINE Essential Ally of the Profession

for **Prevention . . . Diagnosis . . . Therapy**

In addition to the many Iodine specialties, the following Iodine preparations, official in United States Pharmacopoeia XIII and National Formulary VIII, are widely prescribed in everyday practice:

U.S.P. XIII	N.F. VIII
CALCIUM IODOBEHENATE	AMMONIUM IODIDE
CHINIOFON	FERROUS IODIDE SYRUP
DILUTED HYDRIODIC ACID	IODINE AMPULS
HYDRIODIC ACID SYRUP	IODINE OINTMENT
IODINE	IODINE SOLUTION
STRONG IODINE SOLUTION (LUGOL'S)	PHENOLATED IODINE SOLUTION
IODINE TINCTURE	STRONG IODINE TINCTURE
IODIZED OIL	IODOCHLOROHYDROXYQUINOLINE
IODOPHTHALEIN SODIUM	IODOCHLOROHYDROXYQUINOLINE TABLETS
IODOPYRACET INJECTION	IODOFORM
POTASSIUM IODIDE	POTASSIUM IODIDE SOLUTION
SODIUM IODIDE	POTASSIUM IODIDE TABLETS
An Antiseptic of Choice	COLLOIDAL SILVER IODIDE
IODINE TINCTURE U.S.P. XIII (2%)	SODIUM IODIDE AMPULS
	THYMOL IODIDE

IODINE EDUCATIONAL BUREAU, INC.

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NNR

PRODUCTS RECENTLY ACCEPTED BY THE A. M. A. COUNCIL ON PHARMACY AND CHEMISTRY

Council descriptions of new drug products only are published regularly in THIS JOURNAL *as they are accepted. Rules upon which the Council bases its action appeared in the July (7:320) 1946 issue, and may be secured in pamphlet form upon request to the Secretary, Council on Pharmacy and Chemistry. American Medical Association, 535 N. Dearborn St., Chicago 10, Ill.*

AMINOPEPTODRATE.—"Caminoids" - Arlington.—An enzymatic digest of extracted liver and beef muscle, wheat gluten, soya, yeast, casein and lactalbumin with dextrose, maltose and sucrose, containing amino acids and polypeptides equivalent to proteins (N × 6.25) 45% and carbohydrates 40% to provide a total of 350 available calories per 100 Gm.

Actions and Uses.—Aminopeptodrate is used to supplement the diet in conditions in which specially high protein intake is indicated and it is most feasible to accomplish this by use of ordinary foods.

Dosage.—Aminopeptodrate provides the average adult daily protein requirement when administered in amounts of one Gm. per Kg. of body weight per 24-hour period. It is administered orally in either hot or cold liquids as suited to the patients.

Arlington Chemical Company, Yonkers, N. Y.

Caminoids: 170.1-Gm., 453.6-Gm., 2.27-Kg. and 4.54-Kg. containers. One tablespoonful (9 Gm.) contains 4 Gm. of protein as partial hydrolysate.

MUCIN-ALUMINUM HYDROXIDE-MAGNESIUM TRISILICATE.—"Mucotin" - Harrower.—An antacid mixture of gastric mucin, dried aluminum hydroxide gel, U. S. P. ($Al_2O_3 \cdot xH_2O$), and magnesium trisilicate, U. S. P. ($2MgO \cdot 3SiO_2$, xH_2O), containing the labeled amounts of these ingredients.

Actions and Uses.—A mixture of histamine-free gastric mucin, aluminum hydroxide and magnesium trisilicate has been found to be an effective combination for oral administration in the control of symptomatic gastric hyperacidity and as an adjunct in the treatment of peptic ulcer. Gastric mucin has been shown to impart to the mixture a more distinct protective coating effect on the gastric mucosa than can be demonstrated with the use of antacids alone. Gastroscopic studies indicate that the mucin-antacid combination definitely coats the ulcer crater and may remain in the stomach for over an hour after instillation of the mixture. The antacid effect of the rapidly reacting aluminum hydroxide and the more slowly but prolonged reacting magnesium trisilicate, imparts to the mixture the advantages of both these antacids. The presence of magnesium trisilicate is also believed to counteract the constipating effect of the aluminum hydroxide but the available evidence on this point is not conclusive.

Dosage.—There is as yet no definite evidence by which to determine the optimum exact proportions of the antacids to be used in the mixture, but observations thus far indicate that best results are obtained with preparations containing approximately 10% of gastric mucin. A ratio of 1: 1.5: 2.75 for gastric mucin-aluminum hydroxide-magnesium trisilicate has been found to give good results. A tablet preparation of these proportions containing gastric mucin 0.16 Gm., dried aluminum hydroxide gel 0.25 Gm. and magnesium trisilicate 0.45 Gm. is recommended in doses of two tablets every 2 hours. The tablets should be well chewed and no fluids taken during the following half hour.

Tests and Standards.—

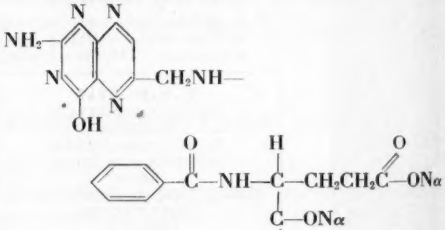
For tests and standards see *J. Am. Med. Assoc.*, **140:** 22 (1949).

The Harrower Laboratory, Inc., Glendale 5, Calif.

Tablets Mucotin: Each tablet contains gastric mucin 0.16 Gm. dried aluminum hydroxide gel 0.25 Gm. and magnesium trisilicate 0.45 Gm.

U. S. patent applied for Lutheran Univ. Assoc. (Valparaiso University); U. S. trademark 519,949.

SODIUM FOLATE.—Sodium Folvite-Lederle.—Sodium pteroylglutamate.—Sodium N-[4 - {[(2 - amino - 4 - hydroxy - 6 - pteridyl) methyl]-amino} benzoyl] glutamate-$C_{19}H_{18}N_7NaO_6$.—M. W. 463.4.—Sodium folate is made by dissolving folic acid in dilute sodium hydroxide. The salt is not isolated from the solution. The structural formula of sodium folate may be represented as follows:



Actions and Uses.—Sodium folate possesses the activity of folic acid and is preferred when parenteral therapy is indicated.

Dosage.—Same as for folic acid. (See N. N. R. 1948, p. 558.)

Tests and Standards.—

The folic acid used in preparing sodium folate solution responds to the tests and assay given in the monograph for Folic Acid—N.N.R.

For additional tests and standards see *J. Am. Med. Assoc.*, **140:** 22(1949).

Kremers-Urban Company, Milwaukee 1

Solution Sodium Folate: 15 mg. per cc. 1-cc. ampuls.

SULFADIAZINE - SULFAMERAZINE COMBINED.—Mer-Diazine-McNeil.—A mixture of equal parts of sulfadiazine and sulfamerazine to which there may or may not be added a suitable compatible agent to increase the *p*H of the urine.

Actions and Uses.—The combination of equal parts of sulfamerazine and sulfadiazine has been shown to provide approximately the same therapeutic activity that is obtained when either drug is administered singly in doses equal to the sum of the two. Comparable total sulfonamide blood levels are thus produced with the same doses of the mixture as for either drug given alone. Because each of the component sulfonamides has its own distinct urinary solubility, the combination which contains only half the usual therapeutic dose of each drug is also potentially less toxic and less liable to be accompanied by crystal deposition from the urine. It has been demonstrated that the incidence of renal crystalluria is reduced to about the same extent as it would be by the administration of 12 Gm. of sodium bicarbonate per day with therapeutic doses of either sulfonamide alone. The simultaneous administration of a urinary alkalizer with the mixture of sulfonamides, still further reduces the tendency of the drug to crystallize out and form deposits in the kidney, although less alkali is required than when the drugs are given singly. It should be emphasized, however, that because of the closely similar chemical structure of the two drugs, the incidence of drug sensitivity and other toxic manifestations of sulfonamide therapy is considered to be about the same for the mixture as for either drug alone.

Dosage.—The dosage of total sulfonamides represented by the mixture should be not less nor more than is recommended for the therapeutic use of the constituent sulfonamides singly. See statements under Sulfadiazine and Sulfamerazine. The use of a lower total sulfonamide dose than the single recommended dose would not be therapeutically effective; the use of a higher total dose than customary for the drug given singly would defeat the purpose of the mixture.

Tests and Standards.—

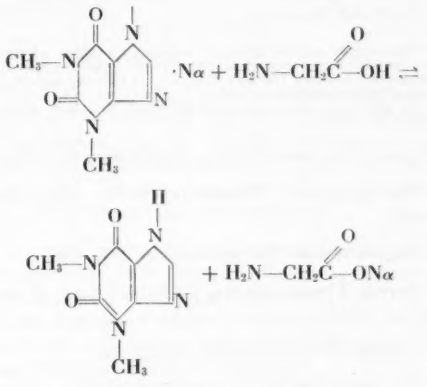
The sulfadiazine and sulfamerazine used in the manufacture of Sulfadiazine-Sulfamerazine Combined respond to the tests and assays given for these substances in the U. S. Pharmacopoeia.

Sulfadiazine-Sulfamerazine Combined, Liquid Suspension: This preparation is a thick, creamy, stable, liquid suspension. For additional tests and standards see *J. Am. Med. Assoc.*, 140: 21 (1949).

McNeil Laboratories, Inc., Philadelphia 32

Liquoid Mer-Diazine: 120-cc. and 480-cc. bottles. A suspension containing 1.5 Gm. sulfamerazine and 1.5 Gm. sulfadiazine per 30 cc. solution.

THEOPHYLLINE-SODIUM GLYCINATE.—"Glynazan."—First Texas Chemical.—"Glytheonate"—Patch.—"Synophylate"—Central.—"Theoglycinate"—Brayten.—$C_7H_8N_4O_2.C_2H_4NNaO_2$.—F. W. 491.4.—Theophylline-sodium glycinate contains slightly more than two moles of glycine to one mole of theophylline sodium. It contains not less than 49 nor more than 52% Theophylline U. S. P. It is considered to exist in a state of equilibrium which may be represented as follows:



Actions and Uses.—Theophylline-sodium glycinate has the typical action of other solubilized forms of theophylline such as theophylline sodium acetate and theophylline ethylenediamine (aminophylline), with the advantage that it is somewhat more stable in air and less irritating to the gastric mucosa. It is thus tolerated orally in larger doses than are possible with other theophylline preparations and it can be administered by mouth in liquid form as well as non-enteric coated tablet form. It is incompatible for compounding with acidic drugs. Theophylline-sodium glycinate is only slightly less soluble than aminophylline commonly employed for the injection of theophylline, but it can be administered alone or alternated with penicillin as an aerosol for inhalation in the treatment of severe bronchial asthma. Until more evidence becomes available, claims for the uses of theophylline-sodium glycinate are restricted to those recognized for aminophylline; its value in cardiac conditions other than paroxysmal cardiac dyspnea is considered to be unestablished.

Dosage.—Theophylline-sodium glycinate consists of approximately 50% of anhydrous theophylline whereas aminophylline consists of approximately 80%. The dose of theophylline-sodium glycinate would thus be expected to be about one-third more than aminophylline.

Orally, either as powder, tablets, elixir or syrup: Adults, 0.3 Gm. to 1.0 Gm.; children over 12 years, 0.15 Gm. to 0.4 Gm., children 6 to 12 years, 0.1 Gm. to 0.2 Gm. every four to six hours. The powder or tablets are preferably administered with water after meals. Suppositories are recommended only for

adults until rectal doses for children are established. The adult rectal dose is 0.78 Gm. every 4 to 6 hours. Oral doses for children under 6 years are also unestablished.

Theophylline-sodium glycinate may be administered as an aerosol by nebulization with oxygen of a 5 to 10% solution for inhalation, preferably under a canopy. Nebulization of 2 cc. of such a solution every four hours may be effective in refractory cases of bronchial asthma; very severe dyspnea may require continuous therapy or alternate inhalation of nebulized anti-infective agents such as penicillin.

Tests and Standards.—

Theophylline-sodium glycinate occurs as a white, odorless powder with the characteristic bitter taste of theophylline. It decomposes between 190 and 210° C. It is freely soluble in water and decomposed by acids.

For additional tests and standards see *J. Am. Med. Assoc.*, 139: 1149 (1949).

Brayten Pharmaceutical Company, Chattanooga, Tenn.

Theoglycinate (*Powder*): Bulk. 113 Gm. bottles.

Suppositories Theoglycinate: 0.78 Gm.

Syrup Theoglycinate: 0.13 Gm. per 4 cc., 240-cc. bottles.

Tablets Theoglycinate: 0.325 Gm.

U. S. patent 2,433,765; U. S. trademark 501,300.

The Central Pharmacal Company, Seymour, Ind.

Synophylate (*Powder*): 113-Gm. and 454-Gm. bottles.

Suppositories Synophylate: 0.78 Gm.

Syrup Synophylate: 0.33 Gm. per cc., 480-cc. and 3.84-liter bottles.

Tablets Synophylate: 0.33 Gm.

Licensed under U. S. patent 2,433,765; U. S. trademark pending.

First Texas Chemical Mfg. Co., Dallas, Texas

Glynazan (*Powder*): 113-Gm. and 454-Gm. bottles.

Elixir Glynazan: 0.26 Gm. per 4 cc., 480-cc. and 3.84-liter bottles.

Syrup Glynazan: 0.13 Gm. per 4 cc., 480-cc. and 3.84-liter bottles.

Tablets Glynazan: 0.324 Gm.

Licensed under U. S. patent 2,433,765; U. S. trademark pending.

The E. L. Patch Company, Boston

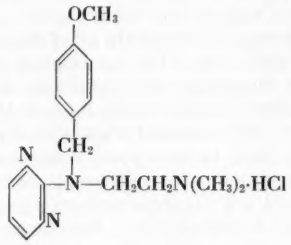
Glytheonate (*Powder*): 113-Gm. and 454-Gm. bottles.

Suppositories Glytheonate: 0.78 Gm.

Tablets Glytheonate: 0.324 Gm.

Licensed under U. S. patent 2,433,765; U. S. trademark pending.

THONZYLAMINE HYDROCHLORIDE.—"Neohetramine Hydrochloride"—Wyeth.— N,N - Dimethyl - N′ - (*p* - methoxybenzyl) - N′ - (2 - pyrimidyl) ethylenediamine hydrochloride.—$C_{16}H_{22}N_4O \cdot HCl$.—M. W. 322.83.—The structural formula for thonzylamine hydrochloride may be represented as follows:



Actions and Uses.—The therapeutic action of thonzylamine hydrochloride is qualitatively the same as with other members of the antihistaminic series, but the frequency and degree of effectiveness is of a lower order. Its outstanding advantage is that it is tolerated better than the other compounds, sedation being less frequent and less severe.

Dosage.—The average adult dose is 100 mg.

Tests and Standards.—

Thonzylamine hydrochloride occurs as a white, crystalline powder, having a faint odor. It melts between 173 and 176° C. It is very soluble in water, freely soluble in alcohol and chloroform, and practically insoluble in ether. The free base is obtained as an oil on the addition of 5% sodium hydroxide to an aqueous solution of thonzylamine hydrochloride. A 2% aqueous solution of thonzylamine hydrochloride has a *p*H between 5.1 and 5.7.

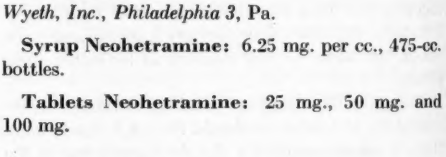
For additional tests and standards see *J. Am. Med. Assoc.*, 139: 1148 (1949).

Wyeth, Inc., Philadelphia 3, Pa.

Syrup Neohetramine: 6.25 mg. per cc., 475-cc. bottles.

Tablets Neohetramine: 25 mg., 50 mg. and 100 mg.

ZINCUNDECATE.—"Desenex"—Wallace & Tiernan.—A preparation containing as its active ingredients undecylenic acid and zinc undecylenate. Their structural formulas may be represented as follows:



Actions and Uses.—Zincundecate is proposed for use in superficial dermatomycosis, including epidermatosis inguinale, tinea pedis, otomycosis, moniliasis tinea corporis and tinea versicolor.

Dosage.—Apply twice daily, preferably using the ointment at night, and with ambulatory patients, the powder during the day.

(*Continued on Page 369*)

National Pharmacy Week

The Student Branches of the AMERICAN PHARMACEUTICAL ASSOCIATION throughout the Nation are submitting reports on their activities in connection with the 1949 observance of National Pharmacy Week. THIS JOURNAL would like very much to be able to acknowledge in this column all activity reports which have been submitted. However, space does not permit such acknowledgments, but as many reports as possible will be published in a future résumé of this year's Pharmacy Week observance.

The AMERICAN PHARMACEUTICAL ASSOCIATION sincerely thanks all the Student Branches for their splendid cooperation.

STUDENT BRANCHES

IN OBSERVANCE of National Pharmacy Week, the **University of Washington Student Branch** heard Dr. Thomas Carlile, a cancer specialist at the Virginia Mason Cancer Clinic, speak concerning nuclear fission and radioactive elements used in the detection and treatment of some types of cancer. Students of the College of Pharmacy, as well as other students of the University and their guests, were invited.

On May 4, the **St. John's Student Branch** held its final monthly meeting for the present school year. Dean John L. Dandreau discussed the Jacksonville Convention and a special color film entitled "Hypodermic Syringes and Needles" was shown by Marshall G. Meriam of Becton, Dickinson & Co., Rutherford, N. J.

In observance of National Pharmacy Week, Dr. Kasdon, a cancer specialist from Boston, reviewed the danger signals and told of the newest developments in research and clinical work at a **Student Branch** meeting of the **Massachusetts College of Pharmacy.**

Newly elected officers of the **Student Branch** of the **University of Georgia** are: Robert Petruzzo, Philadelphia, Pa., president; Walter Strange, Americus, Ga., vice-president; Patsy Gleason, Jeffersonville, Ga., secretary; Glenna Freeman, Atlanta, Ga., corresponding secretary; and Guy Evans, Conyers, Ga., treasurer.

Officers of the **University of Florida Branch** for 1949 are: Lucien Fischesser, Bradenton, president; Frank Porter, Jacksonville, vice-president; Charles Anderson, Dundee, secretary; Irwin Stephens, Pensacola, treasurer; Stanley Gilsen, New York, reporter; and Hoke Johnson, Daytona Beach, parliamentarian.

LOCAL BRANCHES

Dr. Leon A. Sweet, Director of Research, Parke Davis & Co., spoke at the May meeting of the **Philadelphia Branch** on the development of chloramphenicol (Chloromycetin). A report on the Jacksonville Convention was made by Dr. Madeline O. Holland, the delegate to the meeting.

The Northern California Branch met on May 18 to hear Dr. R. W. Rule, Jr., Chairman of Operative Dentistry, School of Dentistry, and Dr. D. C. Brodie, Associate Professor of Pharmacy, School of Pharmacy, both of the University of California, discuss "Pharmacy's Role in Dentistry."

Arrangements were made by the **Southeast Wisconsin Branch** for 60 pharmacists to visit the Parke, Davis and Co. plant, Detroit, Mich., on May 23 and 24.

"New Drugs and Devices" was the topic discussed at the May meeting of the **New York Branch.** Dr. Yale Kneeland, Associate Professor of Medicine, Columbia University, spoke on "Clinical and Pharmacological Aspects of Aureomycin," and Walter F. Wargell, Director, Professional Products Division, Strong Cobb & Co., Inc., Cleveland, Ohio, spoke on "Ampin—A New Automatic Injection Device."

NEW AND NONOFFICIAL REMEDIES
(Continued from Page 368)

Tests and Standards.—

UNDECYLENIC ACID.—10-hendecenoic acid.—10 undecenoic acid.—$C_{11}H_{20}O_2$.—M. W. 184.27.

Undecylenic acid occurs as a yellow liquid with a characteristic odor. It is practically insoluble in water and very soluble in alcohol. The refractive index at 25° C. is about 1.4486. The specific gravity of undecylenic acid at 25° C. is about 0.9110.

For additional tests and standards see *J. Am. Med. Assoc.*, 140: 21 (1949).

Wallace & Tiernan Products, Inc., Belleville, N. J.

Desenex (Powder): 45-Gm. sifter containers and 454-Gm. jars. A fungicidal powder containing zinc undecylenate 20%, undecylenic acid 2% and talc U. S. P. 78%.

Ointment Desenex: 30-Gm. tubes and 454-Gm. jars. A fungicidal ointment containing zinc undecylenate 20%, undecylenic acid 5% in a water-miscible base q.s.

COLLEGES

Walter Cousins, editor of the *Texas Pharmaceutical Journal* and secretary of the Texas State Pharmacy Board, spoke at a recent dinner dance of the **University of Houston's Pharmacy School.**

Charles H. Stocking has been appointed Dean of the **University of Michigan College of Pharmacy.** He has served as acting director of the Pharmacy College since July, 1947, and has been a member of the University of Michigan faculty since 1920. Dean Stocking, a native of Stockbridge. Mich., was graduated from the University of Michigan College of Pharmacy in 1909. He previously taught at the Kansas City College of Pharmacy and the University of Oklahoma.

Details of the sixth seminar on modern pharmaceutical practice at the **Philadelphia College of Pharmacy and Science** have been completed. The course will be conducted at the College on July 12, 13, and 14. Pharmacists who have graduated from any accredited college of pharmacy may register. The registration fee of $30 will cover the cost of lectures, demonstrations, notebooks, prepared notes, and three luncheons and a dinner during the seminar. Further details may be obtained or registration made through the Registrar of the College at Forty-third St., Woodland and Kingsessing Aves., Philadelphia 4, Pa.

A grant of $15,000 has been made to the **Temple University School of Pharmacy** for research in the use of specific drugs, which it is hoped may prove to be the key to substances that will alleviate cancer. Dean H. Evert Kendig revealed the grant has been made by A. C. Bonebrake and J. Warren Smith, both of Portland, Ore., and Wallace M. B. Lynch of Upper Darby, Pa. Clark A. Kelly of Pueblo, Colo., who is now studying for a master's degree at the **Temple University School of Pharmacy,** has been awarded a fellowship by the American Foundation for Pharmaceutical Education. Dr. E. L. Newcomb, secretary and general manager of the foundation, announced the award at a recent student convocation at Temple.

The **Massachusetts College of Pharmacy's** Refresher Course was given on the evenings of May 3, 5, 10, and 12 at the college in Boston. The new research and bacteriology laboratories were open for inspection the last evening.

At the first student alumni dinner on May 18, an oil portrait of Dr. Robert C. Wilson, Dean Emeritus of the **University of Georgia** and Honorary President of the AMERICAN PHARMACEUTICAL ASSOCIATION, was presented by the students and alumni of the School of Pharmacy. William H. Walls of Etowah, Tenn., was given the Robert C. Wilson award, having been elected by his classmates the outstanding senior of the year.

Newly elected officers of Rho Chi at the **University of Georiga** are: Charles Waldrop, Savannah, president; Lamar Jackson, Tignall, vice-president; Durvard Entrekin, Tallapoosa, secretary and treasurer; and Iva Mae Wallace, Athens, historian.

On April 13 formal dedication ceremonies were held for the recently completed Fitch Hall of Pharmacy and Harvey Ingham Hall of Science on the **Drake University** campus at Des Moines, Iowa. A gift to the university by the F. W. Fitch Company, Des Moines, and Fred W. Fitch, chairman of the board, made possible the Hall of Pharmacy, and the Hall of Science is named after the editor emeritus of the *Des Moines Register and Tribune,* and was made possible through a gift of the Gardner Cowles Foundation. Both buildings are finished in brick, metal and glass and have solid tiers of windows along the north and south sides to admit a maximum of natural light. Forced ventilation assures constantly changing air and full use of floor space is permitted by supply cabinets and clothes racks built into the walls. Doors opening on corridors of warm gray building tile are in gaily contrasting colors. This same bright color scheme is used on the supply pipes, each in a different shade, which run uncovered along the ceilings for accessibility.

Eight professors who have served an aggregate of 247 years with **Columbia University's College of Pharmacy** were honored on May 5 at an alumni jubilee dinner. The dinner commemorated the 120th anniversary of the founding of the College of Pharmacy and paid tribute to the following professors: Charles W. Ballard, dean of the college; Lewis N. Brown, Horace M. Carter, Fanchon Hart, Samuel S. Liberman, Frank J. Pokorny, Abraham Taub, and Curt P. Wimmer.

On the 14th annual Scholarship Day held at **Howard College,** Colin Jackson Cole, a junior of Springville, Ala., won high class honors in the School of Pharmacy. Others receiving class honors were John Allen Montgomery, Helena, senior class; Xanthia Hahamis, Birmingham, junior class; and Ralph Slade, Lamison, sophomore class.

Senior Class, **Massachusetts College of Pharmacy**, Boston, Mass., Visited A. PH. A. Headquarters on May 20. Following a brief address by Dr. Robert P. Fischelis, A. PH. A. Secretary (fourth from the right, front row), the senior class and members of the faculty of the Massachusetts College of Pharmacy who came to Washington with them, were taken on a tour of the A. PH. A. Headquarters. Acting as guides were Harold V. Darnell (extreme right, front row), Dr. Justin L. Powers (extreme left, front row), Gloria Niemeyer (extreme left, second row), and Dr. Melvin W. Green (second from left, third row). Those not previously identified in the first row are (left to right): Mr. Raymond Vander Wyk, Prof. Carroll B. Gustafson, Mrs. Howard L. Reed (chaperone), Prof. Howard L. Reed, and Mr. E. Warren Heaps (all of the Massachusetts College of Pharmacy).

Dr. Harwell Davis, Jr. of the Pathology Department of the University of Alabama Medical College, addressed the senior class on tumors, and illustrated his talk with slides.

The Drugstore Management class at **Howard College** had an opportunity to view first-hand the operations of a wholesale drug house, when they visited the Walker Drug Co. in Birmingham.

A memorial service for the late Professor Lewis E. Martin, who died on May 19, 1949, will be held at 4 p. m. on June 13, at the Illini Union Building, 715 S. Wood St., Chicago. Professor Martin, who received his degree in pharmacy from the University of Illinois in 1921, had been a member of the faculty of the **University of Illinois College of Pharmacy** since 1922. He was a member of Rho Chi, the AMERCIAN PHARMACEUTICAL ASSOCIATION, the Illinois Pharmaceutical Association, and Kappa Psi. He was a fellow of the American Association for the Advancement of Science.

Members of the graduating class of the School of Pharmacy were guests of honor at the Annual Dinner Dance of the Alumni Association of the **School of Pharmacy, University of Maryland,** at Baltimore on June 2. A special alumni award was given Dr. H. A. B. Dunning in recognition of his unselfish devotion to pharmacy. Presentation was made by Dr. John C. Krantz, Jr., an alumnus of the School of Pharmacy and now professor of pharmacology of the Maryland School of Medicine. Dr. Robert P. Fischelis, Secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION, the principal speaker of the evening, addressed the group on the subject, "The Importance of the Intangibles."

ASSOCIATIONS

The 97th Annual Convention of the **District of Columbia Pharmaceutical Association** was held on May 25 and 26. Dr. Ivor Griffith, president of the Philadelphia College of Pharmacy and Science, spoke at the annual banquet.

The Spring Reunion Dinner of the **Alumni Association of the Philadelphia College of Pharmacy and Science** was held May 25. Alumni President Ruth Miller was toastmistress and John Facenda, news commentator of Radio Station WIP, spoke to the group on "Our World Today." President Ivor Griffith talked about "Our College Today."

At the 71st Annual New York State Pharmaceutical Convention to be held at Lake George June 12 to 17, new products, merchandising techniques and methods for the improvement of the pharmacist's business and prestige will be demonstrated in classes and business clinics.

Louis Covatta was re-elected president of the **Troy (N. Y.) Area Pharmaceutical Association** recently. Other officers elected are: Edmond Belfiglio, re-elected first vice-president; George Stevens, second vice-president; J. Dayton Doyle, treasurer, re-elected for the fourth term; and Morris Daffner, secretary.

HOSPITAL PHARMACY

"Meeting the Crisis in Health Care" was the theme of the annual convention of the **Catholic Hospital Association** which was held in St. Louis, Mo. during the week of June 13. The general meetings

of the Catholic Hospital group emphasized the new concept of the hospital—a medical center to its community—reviewed the religious and spiritual elementsin the hospital service, and studied the adequacy of hospital facilities to meet the needs of the people.

The AMERICAN PHARMACEUTICAL ASSOCIATION Division of Hospital Pharmacy sponsored an exhibit at the convention depicting the role of the pharmacist in providing care to hospital patients.

Hospital pharmacists in the St. Louis area were present throughout the convention week to talk with administrators and other hospital personnel regarding problems on hospital pharmacy. Associated groups also held sessions during the week and sectional meetings were held for representatives from the various hospital departments. Among the preconvention activities was the special institute for hospital pharmacists, which was sponsored jointly by the Catholic Hospital Association, the AMERICAN PHARMACEUTICAL ASSOCIATION, and the St. Louis University School of Medicine.

Plans are going forward in organizing the program for the institute on hospital pharmacy which will be held on the University of Chicago campus during the week of August 29. Herbert L. Flack, president of the **American Society of Hospital Pharmacists,** is in charge of the program and is working in cooperation with Dr. Dolezal of the American Hospital Association and Dr. Robert P. Fischelis, Secretary of the AMERICAN PHARMACEUTICAL ASSOCIATION. The program will be patterned after that of previous institutes. Official announcement will be made in the near future and applications may be sent to the American Hospital Association.

C. Joseph Vance, chief pharmacist at South Highlands Infirmary in Birmingham, Ala., was chosen president-elect of the **Southeastern Society of Hospital Pharmacists** at its recent meeting held in Biloxi. Other officers elected at this meeting included Mrs. Lillian Price, chief pharmacist of Emory University Hospital, Atlanta, Ga., vice-president; and Miss Johnnie M. Crotwell, chief pharmacist at the Druid City Hospital, Tuscaloosa, Ala., secretary-treasurer.

Twenty-two hospital pharmacists attended the first **hospital pharmacy seminar** which was held at the University of Texas College of Pharmacy May 9 and 10. Speakers included Dean Henry M. Burlage, Professor Charles O. Wilson, and Professor John W. Boenigk of the College of Pharmacy, University of Texas; A. L. Raithel, Narcotic Division, Bureau of Internal Revenue; Albert P. Lauve, Chief Pharmacist, Mercy Hospital, New Orleans, La.; Adela Schneider, Chief Pharmacist, Southern Pacific Hospital, Houston, Tex.; Lt. Col. James T. Richards, Director, Department of Administration, Medical Field Service School, Brooke Army Medical Center, Fort Sam Houston; Cedric M. Jeffers, Chief Pharmacist, Scott and White Clinic, Temple, Tex.; and Frank H. Bowers, Chief Pharmacist, Hermann Hospital, Houston, Tex.

Steps were taken to organize a state group of the Texas Hospital pharmacists and affiliate with the national chapter of the American Society of Hospital Pharmacists. Lewis Smith, chief pharmacist at Baylor University Hospital, was elected president of the organization.

MANUFACTURERS

The award of two new research grants and the renewal of two others were recently announced by Dr. L. Earle Arnow, Director of Research, **Sharp & Dohme, Inc.,** Philadelphia. New grants are to the University of Pennsylvania to support a research program of Dr. Paul Gyorgy and associates in the Department of Pediatrics, and to the North Carolina Pharmaceutical Research Foundation to support work on hydrogenation studies being conducted by Dr. Walter H. Hartung, School of Pharmacy, University of North Carolina. Grants were renewed to Columbia University in support of Dr. H. W. Brown's work on testing new compounds for antimalarial, filaricidal, and amebicidal properties and to Massachusetts Institute of Technology in support of Dr. Arthur C. Cope's work on barbiturates, antiseptics, anesthetics, and analgesics.

Dr. W. A. Feirer, executive vice-president of Sharp & Dohme, Inc., has announced that construction of the company's new medical research laboratories is expected to start in September at West Point, Pa., and to be ready for occupancy by spring of 1951.

The **Merck Fellowship Board** of the National Research Council has announced that 10 fellowships have been awarded for the academic year 1949–1950. These awards are given annually to provide special training and experience to young scientists who have demonstrated marked ability in research in chemical or biological science. Winners of the fellowships are chosen each year by a special board of the National Research Council.

Dr. Hans Molitor, Merck Institute director, has announced that Dr. Richard E. Shope has joined **The Merck Institute** for Therapeutic Research as associate director. Associated with Dr. Shope will be Dr. Laurella McClelland.

The appointment of William J. Boegly as director of the Pharmaceutical Manufacturing Department of **Winthrop-Stearns, Inc.,** Rensselaer, N. Y., has been announced.

In a general regrouping of Squibb research responsibilities, Dr. Geoffrey W. Rake has been appointed Medical Director, and Dr. Asger F. Langlykke has been appointed director of the Research and Development Laboratories, according to an announce-

ment by Carleton H. Palmer, chairman of the Board of **E. R. Squibb & Sons.**

Medical Director E. G. Upjohn of **The Upjohn Co.,** Kalmazoo, Mich., recently announced that Thomas R. Noonan, M.D., has joined the staff of the Upjohn Medical Division.

Owens-Illinois Glass Co. is making available free to pharmacists a new merchandising folder to be used as a wrap-around piece for dry prescriptions. Space is provided on the back cover for the pharmacist to stamp or imprint his name. This folder entitled, "We give these '4' extra ingredients with all capsule, tablet and powder prescriptions," lists quality, precision, Rx protection, prompt service. A wrap-around folder, "Safe Rules for Handling and Taking Medicine," also is available from the company for liquid prescriptions.

Edward Mallinckrodt, chairman of the Board of **Mallinckrodt Chemical Works,** has announced the election of Joseph Fistere as president of the company, Charlton MacVeagh as vice-chairman of the Board, Dr. John R. Ruhoff to fill a vacancy on the Board of Directors, and John E. Gaston, assistant secretary.

L. A. Flagler has been appointed works manager of **William R. Warner & Co., Inc.,** with responsibility for both the New York and St. Louis divisions.

Dr. William H. Lycan has been appointed director of research of **Johnson and Johnson,** New Brunswick, N. J., according to a recent announcement by George F. Smith, president of the company.

In order to facilitate inclusion in the *United States Pharmacopœia* of its process for the biological assay of curare, **E. R. Squibb & Sons** has made available to the public by formal dedication its patent covering that process, R. J. Dahl, Vice President in charge of Research and Development, has announced. The patented process is being considered for inclusion in the *U. S. Pharmacopœia.* The use of curare had been limited by lack of physiologically standardized preparations suitable for therapeutic, particularly intravenous, administration. Since prior assay methods did not give assurance of establishing comparative potencies, clinical application on a general scale was not possible. The process of the Squibb patent has enabled accurate standardization and thus has provided a reliable preparation.

Earl L. Burbidge and William F. Wenner have been advanced to assistant directors of the **Upjohn Medical Division.**

Don V. Hall, of Chicago, has been appointed as director of Pharmaceutical Control at Haack Laboratories, according to an announcement by J. C. Jensen, vice-president.

Robert L. McNeil

Re-elected President of the American Drug Manufacturers Association at A.D.M.A.'s annual meeting at Boca Raton, Fla., April 4 to 7. Mr. McNeil is president of McNeil Laboratories, Inc., Philadelphia, Pa.,

Drug Sales Expected to Remain High, A. D. M. A. Head Says

Because of the increased public emphasis on good health, 1949 retail drugstore sales volume is expected to hold its own in the face of declining sales in other retail fields, Robert L. McNeil, president of the American Drug Manufacturers Association, declared in his address before the 37th annual meeting of that organization at Boca Raton, April 4 to 7.

Both Mr. McNeil and Carson P. Frailey, executive vice-president of A. D. M. A., devoted major portions of their annual addresses to the interrelationship between pharmaceutical manufacturers and dispensing retail pharmacists.

With some economic readjustment inevitable, Mr. McNeil pointed out, 1949 may turn out to be the "tapering-off" year for the general economy. "However, the outlook for retail drugstore sales is much more promising. Retail drug volume may equal 1948, or at worst the decline should not exceed two per cent," he said.

A. D. M. A. members heard reports on current research in the drug field, including predictions that developments indicate that a number of new pharmaceuticals are expected to be available soon.

Dr. Gregory Stragnell has joined **Organon Inc.** as executive vice-president and general manager at their new plant in Orange, N. J.

White Laboratories, Inc., recently announced the appointment of Dr. Henry Allen Strade as assistant medical director. Dr. Strade is a graduate of Columbia Medical School and is a member of the New York Academy of Science.

At the Cleveland Union Industries Show, May 18 to 22, **Schenley Laboratories, Inc.,** displayed a group of behind-the-scenes photographic "blowups" dealing with various aspects of production and use of penicillin.

A new building is now under construction at the Malvern, Pa., plant of **J. Bishop & Company Platinum Works,** Medical Products Division. The new unit, containing 25,000 feet of manufac-

turing space, will house all operations in the manufacture of "Blue Label" hypodermic needles, including the drawing of the 18–8 stainless steel hypodermic tubing used in the needles.

At a recent two-day divisional sales convention held in Atlanta, Ga., Joseph Ushkow, president of **Endo Products, Inc.,** announced the expansion of the southern sales division with eventual establishment of branch headquarters in Atlanta.

AT RANDOM

Dr. H. Trendley Dean, Dental Director for the U.S.P.H.S. and Director of the National Institute of Dental Research, has been selected by the Association of Military Surgeons of the United States to receive the **Gorgas Award for 1949** "for outstanding contributions in the field of military medicine." The award, sponsored by **Wyeth, Inc.,** of Philadelphia, Pa., will be presented to Dr. Dean at the annual banquet of the Association on November 11 at the Statler Hotel, Washington, D. C.

Grants of $293,452 by the **National Cancer Institute** to support laboratory and clinical research and of $79,853 for research facilities, have been announced by Oscar R. Ewing, Federal Security Administrator. Among these is the first Federal grant for cancer research in Florida, $12,560, to the University of Florida for work under direction of Dr. Francis E. Ray, who will study experimental production of gastric cancer in animals by chemical means.

The **National Advisory Mental Health Council** held its semi-annual meeting in May in Washington, D. C. The Council, which is the advisory body to the Surgeon General of the U. S. Public Health Service on matters of mental health, urged broad community participation in the development of State and local mental health programs. In addition to State Mental Health Advisory Councils, it was recommended that standards be developed to guide State and local governments in the employment of mental health personnel and that training programs be developed for attendants and other non-professional personnel in mental hospitals. The Council stressed the need for intensified psychiatric training in medical schools, and recommended that Federal grants be made available to approved medical schools as soon as funds become available. Such grants already made to 42 medical schools will become effective July 1, 1949. Special institutes for State Mental Health Authorities, for mental health nurse consultants, and for chief psychiatric social workers in State mental health programs were approved by the Council.

After consultation with officials of the U. S. Public Health Service, the major **manufacturers of fluorescent lights** stated that after June 30, 1949, they will no longer use beryllium phosphor in the manufacture of fluorescent lights, thereby eliminating the danger of getting beryllium in cuts where lights are broken and injuries result. Beryllium causes cuts to heal very slowly, sometimes causes swelling, and is injurious if the dust in breathed into the lungs.

The **Passano Foundation $5000 Award for 1949** has been given Dr. Oswald T. Avery, emeritus member of the Rockefeller Institute for Medical Research, for his extensive investigations of the pneumococci, their classification, analysis, and immunological relationships. The Passano Foundation, established by **The Williams & Wilkins Co.,** medical publishers, Baltimore, Md., to aid advancement of medical research, has made four previous awards.

The **U. S. Atomic Energy Commission** and the **U. S. Geological Survey** have announced that a 123-page, pocket-sized handbook for uranium prospectors is available to the public for 30¢ from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. The handbook, "Prospecting for Uranium," is available in lots of 100 at a 25% discount.

The **Hebrew University-Hadassah Medical School,** the first medical school to be established in the new State of Israel, opened on May 17 in Jerusalem as a joint undertaking of the Hebrew University and Hadassah. At the opening ceremonies a piece of Vermont marble from the same quarry that is providing marble for the permanent UN headquarters in New York, was presented to Mrs. Haim Yassky, widow of the late director of the Hadassah Medical Organization in Israel. The marble will be placed in the cornerstone of the main medical school building to be erected on Mt. Scopus, outside Jerusalem, as soon as security conditions permit.

At the annual meeting of members of the **National Vitamin Foundation** held recently, Dr. E. Gifford Upjohn, vice-president of The Upjohn Company, Kalamazoo, Michigan, was elected president. Other officers for 1949 are: H. B. Fonda, Burroughs Wellcome & Co., vice-president; J. Paul Folsom, Lederle Laboratories Division, American Cyanamid Co., chairman of the board; Fred J. Stock, vice-president of Chas. Pfizer & Co., Inc., chairman of the executive committee; Robert S. Goodhard, scientific director; Henry K. Urion, secretary; and J. David Hayden, treasurer.

On April 2 the government of **Rumania** took over all privately owned drug, pharmacy and perfume stores as a first step toward nationalizing those businesses. Druggists and perfumers who arrived at their shops in the morning found police guarding the entrances. The official government radio announced that all such enterprises had been seized because they have not been able "to supply the working population properly."

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BENADRYL Hydrochloride (diphenhydramine hydrochloride, Parke-Davis) is effective in a large variety of allergic conditions, including the seasonal types, such as hay fever, and the non-seasonal types, such as acute and chronic urticaria, angioneurotic edema, vasomotor rhinitis, contact dermatitis, erythema multiforme, pruritic dermatoses, dermographism, serum sickness, food allergy, and sensitization to drugs, such as penicillin and the sulfonamides. Relief with **BENADRYL** is rapid. Treatment is simple and patients can be economically maintained free of symptoms.

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FROM THE SECRETARY'S DIARY FOR APRIL

1st Here beginneth the second quarter of 1949, and it is pleasing to note from the first quarter budget figures that things are going along pretty much according to plan. Enjoyed a visit from President Taningco of the Philippine Pharmaceutical Association, who conferred with staff members on problems of pharmacy law enforcement and drug standardization. All day, the telephone jingled with calls from various points in the United States, mostly on problems of the convention. At lunch with Dr. F. R. Moulton, general secretary of the A.A.A.S., and a group of professional society secretaries, located in Washington, discussing the building plans of the A.A.A.S.

2nd This week end occupied with further preparations for the Jacksonville meeting and most of the staff busy at their chores, even though this is a regular "day off." Everything points to a well-attended meeting filled with excellent program material.

5th Early in the morning, a visit from F. Royce Franzoni, who is the chairman of the Committee on National Legislation of the N.A.B.P., to confer on proposed Federal bills affecting various phases of pharmaceutical practice. Now all the reservations completed for transportation to Jacksonville. In the afternoon a trip to Baltimore to confer with Dr. Dunning and to view the site just acquired for the Kelly Memorial, which is to house the activities of the Maryland Pharmaceutical Association. Members of the A. Ph. A. desiring to do so will soon be given an opportunity to make their contribution.

8th All these days busy with the office routine and this morning a visit from Council Chairman Beal, who was en route to Pittsburgh. Sorry to learn that Melvin Green has succumbed to the Wisconsin appeal for transfer of

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his activities to the University campus next fall. At lunch at the Cosmos Club with Dr. George Zook, president of the American Council on Education and a group of scientific and professional society executives to greet the newly appointed Commissioner of Education, Dr. Earl J. McGrath.

11th The heavy Monday routine broken by visits from various government representatives and in the evening a conference with Messrs. Fleck and Hutchison, of the Mack Printing Company working out production programs for National Formulary, the journals and other essential printing.

12th In the afternoon a conference with Dr. Warren F. Draper, who heads the Medical Service of the United Mine Workers, and his staff, on ways and means of supplying drugs to mine workers through the inde pendent pharmacy. After the day's affairs to the National Press Club to view "For Us the Living," a film developed by the Proprietary Association to focus public attention on cooperation between the government and industry in safeguarding the production of drugs and medicines. Many important figures in the drug industry and the profession of pharmacy were among those present; also Dr. Dunbar of the Food and Drug Administration, and several commissioners of the Federal Trade Commission. An opportunity to discuss A. PH. A. business with Finance Committee Chairman Swain and to chat with Jim Hoge, E. A. Newcomb, and many others.

14th Yesterday another conference with the architects on the development of future building plans, and today dictating radio talks and convention reports and conferring by telephone with committee chairmen and meeting with members of the staff. Sorry to miss the annual meeting of the American Foundation for Pharmaceutical Education, but the rush of final convention details keeps us chained to the desk.

15th Early this morning greeting the students of the Medical College of Virginia, who arrived with Professor Kaufman, to view our building on their way back to Richmond from trips to midwestern manufacturing plants. In the evening a visit with Jim Hill, who was on his way by automobile to Jacksonville from Buffalo with his family.

16th A major portion of this Easter week end spent discussing Army and Navy legislation, and the various medical care programs, in preparation for statements and actions to be taken at Jacksonville.

18th Conferring with President Little on the program of the General Sessions and the general convention procedure. Also the long distance wires to Jacksonville busy exchanging ideas on details of the entertainment program.

19th Conferring with House of Delegates Chairman Bert Mull on the setup of the program details for the House, especially for the "off the record" session to be held next Wednesday night at Jacksonville.

20th Conferring with officers of the Teachers' Conferences regarding special programs presenting audio-visual aids as a teaching technique. Also putting the finishing touches on the packing and making ready for the trip to Jacksonville.

30th The previous days spent traveling to and from Jacksonville and at Jacksonville for the convention, which is now history, and which has been universally described as one of our most outstanding meetings. The spring meeting idea seems to have general approval and the attendance gave evidence of this.

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New A.Ph.A. Members

THE ASSOCIATION EXTENDS A CORDIAL WELCOME TO THE FOLLOWING MEN AND WOMEN WHO WERE ACCEPTED FOR ACTIVE MEMBERSHIP DURING THE MONTH PRECEDING PREPARATION OF THIS ISSUE.

ALABAMA

Whitley, John H., Tarrant

CALIFORNIA

Caldwell, Lewis M., Santa Barbara
Gaffney, G. G., San Jose
Krohn, Joseph, San Jose
Longinotti, Charles, San Jose
Lupayne, Joseph A., Lynwood
Nichols, Lucy, Hollywood
Ortzow, John, San Leandro
Sister Mary Aquina Speer, Santa Barbara
Sorenson, A. W., San Jose
Stevens, Paul, Los Angeles
Waber, Bruce D., Van Nuys

FLORIDA

Forth, Patricia, Clearwater Beach
Moody, Henry S., Plant City
Mundy, Elbert J., Jacksonville
O'Brien, Neill, Winter Park
Rosenbaum, Max, Miami Beach
Spector, Sheldon M., Miami Beach

ILLINOIS

Antonelli, Joseph, Oak Park
Lester, Hugh A., Chicago
Levin, Harvey B., Chicago
Rothe, William G., Oak Park
Sams, J. F., Pekin

INDIANA

Smith, Mae Ola, Indianapolis
Weinke, Herman J., South Bend

KANSAS

Beyer, Roy R., Mission
Wedel, Milford N., Wichita

KENTUCKY

Nassberg, Lawrence, Covington

MAINE

Bruce, William D., Portland
Thorne, Herbert E., Old Orchard Beach

MASSACHUSETTS

Doodlesack, Louis, Medford
Gagne, Joseph, Willimansett
Gagne, Mildred G. R., Holyoke
Gagne, Richard J., Holyoke
Pergantides, Michael, Northampton
Sweeley, Carl F., Greenfield
Zareiko, J. S., Dorchester

MICHIGAN

Bennett, Marshall E., Kalamazoo
Jacobsen, Elsie C., Detroit
Prybyla, Michael, Detroit
Sister Daniel J. McMahon, Hancock
Wallace, William J., Detroit

MINNESOTA

Larson, Clarence W., Duluth
Sister Agnes Veronica Lunney, Minneapolis

MISSOURI

Sister Mary A. Lennon, R.S.M., St. Louis

NEBRASKA

Connor, Patrick J., Omaha

NEW HAMPSHIRE

Dion, Sylvio D., Nashua
Roentsch, Elmer A., Keene
Tobey, Alton P., Hampton

NEW JERSEY

Gold, Emanuel, Long Branch

NEW YORK

Bonesteel, Herbert P., Larchmont
Dreyfus, Richard, New York
Emma, P. Armando, Endicott
Fatica, Mario M., New York
Gianno, Vincent A., New York
Glantz, Milton, Woodside, L. I.
Helfert, Jerome F., Kenmore
Marabella, Leo, Buffalo
Salfield, H., White Plains
Willingham, Carl, New York

NORTH CAROLINA

Thompson, Herman O., Chapel Hill

OHIO

Gleason, Eugene H., Cheviot
Hofstetter, Harold F., Toledo
Nolan, Howard E., Toledo
Weinstein, Alvin H., Toledo

OKLAHOMA

Raley, Deane D., Tulsa
Stovall, Porter H., Norman

PENNSYLVANIA

Di Lascio, Edith M., Philadelphia
Gezzer, George, Charleroi
Mattern, Richard H., Pittsburgh
Schindler, Herbert, Philadelphia
Sister Mary Beatrice, Darby

SOUTH CAROLINA

Dorn, Henry H., Columbia
Miller, Charles D., Charleston
Reynolds, Russell D., Naval Base

TENNESSEE

LeMaistre, John W., Chattanooga
Reid, W. D., Memphis
White, Elizabeth S., Nashville

TEXAS

Kennedy, W. C., Houston
Skrivanek, Frank J., El Campo
Vogt, Jeanne, Houston
Wasserman, R., Corpus Christi

UTAH

Hendricks, Douglas H., Provo

WASHINGTON

Boehm, Fred E., Tacoma
Bradley, Dorothy L., Puyallup
Brown, Ruth E., Seattle
Dodds, Roberta E., Seattle
Frederick, Victor W., Walla Walla
Noyes, Glen C., Spokane

WISCONSIN

Hegeman, Rolland L., Milton Junction
Hoeschler James W., La Crosse

U. S. POSSESSIONS

Aguirre, Jose R., Cayey Puerto Rico

FOREIGN

Contzen, Guillermo, Santiago, Chile
Kennedy, Florence K., Winnipeg, Man., Canada
Sarin, Badri, Andheri, Bombay, India

Deceased Members

Abdel-Latif, Ismail A., Columbus, O., Apr. 24, 1949
Duckworth, Fred W., Booneville, Miss.
Henry, Samuel C. (a life member), Chicago, Ill., Apr. 22, 1949
Hewing, A. N., Baltimore, Md., Feb. 9, 1949
Kist, E. Ray, Derry, Pa.
Zoernig, Heinrich, Basel, Switzerland

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OINTMENT
Sodium propionate 12.3%
Propionic acid 2.7%
Sodium caprylate 10.0%
Zinc caprylate 5.0%
Dioctyl sodium sulfosuccinate 0.1%
Inert ingredients 69.9%
including n-Propyl Alcohol 10.0%
1 oz. tubes
POWDER
Calcium propionate 15.0%
Zinc propionate 5.0%
Zinc caprylate 5.0%
Inert ingredients 75.0%
2 and 5 oz. canisters
LIQUID
Sodium propionate 12.3%
Propionic acid 2.7%
Sodium caprylate 10.0%
Dioctyl sodium sulfosuccinate 0.1%
Inert ingredients 74.9%
including n-Propyl Alcohol 12.5%
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science news capsules

A CANCER-CAUSING chemical is now available in tracer form. Synthesis of 2-acetylaminofluorene, in which one of the carbon atoms is the radioactive C-14 isotope, is announced by Drs. Francis E. Ray and C. Robert Geiser of the University of Cincinnati's laboratory of radiochemistry (Science, **109:** 200, 1949).

GLYCERALDEHYDE, a rare chemical which was widely hailed last year as the most promising tooth-decay preventive yet discovered, will do nothing to protect teeth of experimental animals against decay, Dr. James H. Shaw of the Harvard School of Dental Medicine has reported. The results of his experiments, Dr. Shaw said, show that glyceraldehyde, added to the standard test ration of rats for a 14-week period, failed to slow down the usual rate of decay or curb its content.

MEPACRINE HYDROCHLORIDE, a synthetic drug that was used during the war in combating malarial and other human parasites, has been found useful in the treatment of coccidiosis. The report was made by Dr. J. E. Wilson of the veterinary laboratory of the British Ministry of Agriculture and Fisheries in the February 12 issue of *Nature*, British science journal.

$10 WORDS become annoying to most every one. Latest sign of this comes from Ruth S. Bittner of the Medical College of Virginia's department of bacteriology. In the February 18 issue of *Science* she says: "I have listened to numerous lectures in which the speaker mouthed the 10-syllabled word, 'desoxyribonucleic acid,' from five to 25 times." She wants it shorted to "dorna."

AMERICA'S FIRST FACTORY, great-great-granddaddy of the greatest industrial development in the history of the world, has been dug up by scientists and historians at the site of the first permanent English settlement in America. Remains of a glass factory buried under legend as well as earth have been unearthed near Jamestown Island, Va., where pioneer colonists first settled in May, 1607.

COLOR TELEVISION for the teaching of surgery and medicine will have a pioneering demonstration at the June meeting of the American Medical Association at Atlantic City. The project will be sponsored by the Smith, Kline & French Laboratories of Philadelphia and the University of Pennsylvania Medical School. Continuously for four days at the A. M. A. Convention, actual surgery and diagnostic and other medical procedures will be televised in natural color while being performed by the university faculty.

"ORLON," a new synthetic fiber that will rival and surpass nylon for many uses, is about to be produced by several chemical manufacturers. It is made from acrylonitrile, one of the ingredients of the synthetic rubber known as Buna N, is said to possess great strength, and to have superior resistance to wear, heat and chemical action. The fiber is made by polymerizing the chemical so that the molecules have a chance to grow larger and longer, giving it a structure useful in fiber.

AIR is filled with more germs from dust off clothing and skin than from a good hearty sneeze—an observation made by two Scottish bacteriologists, J. P. Duguid and A. T. Wallace, of the University of Edinburgh (*The Lancet, CCLV:* **845,** 1948). As a part of their experiment, two persons known to be harboring *Staphylococcus aureus* germs were isolated in a small, sterile room. To determine how many dust particles would be let loose from their skin and clothing in the course of normal, vigorous activity, the carriers "marked time" at walking pace continuously for 10 minutes, swinging their arms and raising their feet. Later, their noses were tickled with cotton wool swabs to bring on vigorous sneezes in quick succession. From 840 cubic feet of air contaminated by 42 vigorous sneezes only 16 droplet nuclei carrying staphylococcus germs were recovered, but 124 dust particles carrying these germs were recovered from 150 cubic feet of air contaminated by vigorous bodily activity for 150 minutes.

ONE POUND of synthetic detergents is now sold for every five pounds of soap, Foster Dee Snell of Foster Dee Snell, Inc., recently told the American Oil Chemists' Society meeting in New York. He said synthetics usually prove more satisfactory in hard water than in soft and that half the soap used in the household probably is used softening the water so the rest of the soap can do its work. Mr. Snell believes that development of synthetic detergents may help the world food situation because soaps are made from fats and oils, while many of the detergents are made from petroleum.

AGING of the American population has brought about a shift in the nation's health problems and makes necessary a concerted attack on disease of middle and old age, Surgeon General Leonard A. Scheele of the Public Health Service said recently. In an address before the Public Health Forum, Harvard University School of Public Health, Dr. Scheele declared that "A comprehensive program for the care of the chronically ill and the aged is urgently needed. There must be a program of preventive aid control of chronic diseases, together with treatment, convalescent care and rehabilitation."

BIOLOGICAL WARFARE methods are being tested against enemy hordes in California. The enemy is the alfalfa caterpillar, and the weapon used against it is the virus of a wilt disease that apparently affects no other insect and is known to be harmless to animal life. Sprayed on the fields where the caterpillars are feeding, the virus produces a sweepingly fatal epidemic.

FINDING A VACCINE in the family of poliomyelitis viruses is "problem number one" in man's fight against infantile paralysis, according to Dr. John R. Paul, professor of preventive medicine at the Yale University School of Medicine. He reports extensive research, both in this country and abroad, to find a strain of poliomyelitis virus that possesses special immunizing powers and yet is sufficiently harmless so that it could be injected into children.

A GRANT-IN-AID of $5,000 has been made by The Robert Gould Research Foundation, Cincinnati, for research in 1949 by Dr. E. V. McCollum, the discoverer of vitamins A and D and one of the discoverers of vitamin B_1. Dr. McCollum, who is Professor Emeritus of Biochemistry at the School of Hygiene and Public Health of Johns Hopkins University, will continue his experiments in the chemistry of nutrition, studying a problem which has challenged the efforts of chemists for 50 years, namely, the separation in pure form of amino acids which form the digestion products of proteins in the body. At present, only 6 of the 23 known amino acids can be separated from the digestion mixture with a reasonable expenditure of time and effort.

A NEW DUST BASE consisting of a combination of piperonyl cyclonene, with pyrethrins and rotenone, is said to control a wide range of insects but leaves no toxic residues on vegetation. The product, known as CPR Dust Base, has been announced by U. S. Industrial Chemicals, Inc., New York City.

VALUABLE DRUG and animal-feeding preparations may be available from fish waste discarded by Alaska salmon canneries, according to a two-volume study now available from the Office of Technical Services of the Department of Commerce. Among investigations described in the study are: The use of salmon eggs for the production of cholesterol, protein and industrial fat; the vitamin content of experimental fish hatchery foods made from salmon waste; the use of salmon head oil in canning salmon; and the recovery of vitamin A oil.

OTITIS MEDIA is now being treated with sulfamylon, a recently developed sulfa drug that will soon be available to physicians. The announcement was made March 4 by Dr. J. R. Rice, director of medical research of Winthrop-Stearns, Inc., who also stated that the drug has other "wide possibilities." He quoted Dr. Edward L. Howes, F. A. C. S., of Columbia University, as stating that combined with streptomycin it attacks a "wider spectrum of bacterial infections than either penicillin or streptomycin alone." It is also claimed that organisms do not become sensitive to the drug. Chemically, sulfamylon is known as para-(aminoethyl)-benzene sulfonamide hydrochloride. It was originally developed in Germany during World War II.

THE U. S. ATOMIC ENERGY COMMISSION has announced that it will make available without charge to qualified cancer research workers in the United States all radioisotopes now being sold commercially. Previously, only three radioisotopes—those of the elements iodine, phosphorus and sodium—were available free of production costs for use in cancer research. The new policy will make available on a free basis the radioisotopes of more than 50 additional elements. Notable among these is the radioisotope of the element cobalt—known as cobalt 60—which promises to become an effective substitute for radium.

THE WORLD'S FIRST CONGRESS of biochemistry will be held this summer, August 19 to 25, at Cambridge University, London. The sessions of the new congress will be organized into 12 sections covering the following fields: Animal nutrition and general metabolism; proteins; clinical biochemistry; structure and synthesis of biologically important substances; cytochemistry; biological pigments, oxygen carriers and oxidizing catalysts; hormones and steroids; chemotherapy and immunochemistry; plant biochemistry; and industrial fermentations.

HYPNOTISM would be controlled by law and its use for entertainment would be prohibited if the advice of Dr. Lewis R. Wolberg, director of the Post Graduate Center for Psychotherapy, is followed. As a medical procedure, he recently stated at a Cooper Union forum on mental health care, hypnotism is justified only to augment and reinforce other methods of psychiatric treatment which have been proved to be founded on solid, clinical grounds. It should not be used without careful consideration of the patient's motivations, emotional problem and personality forces. It is not a substitute for psychotherapy, he declared, and will not cover up shortcomings in the personality, knowledge and skill of the physician.

PRESCRIPTION INFORMATION SERVICE

(Continued from Page 365)

tories, Union Stockyards, Chicago, is another possible source.

CELLOIDIN AND SYNHEXYL

We will greatly appreciate any information you have available on Celloidin and Synhexyl. —W. R., New York

The only information we have been able to locate concerning Celloidin is that in the 24th edition of the United States Dispensatory, page 1391, which states that this compound is a proprietary form of pyroxylin, usually supplied immersed in water. We regret that we have been unable to locate the name of the manufacturer who supplies the product.

Synhexyl is a simplified name which has been applied to a synthetic organic chemical closely related to one of the constituents of Cannabis. Chemically Synhexyl is 1-hydroxy-3-*n*-hexyl-6-6-trimethyl-7-8-9-10-tetrahydro-6-dibenzopyran. As far as we have been able to determine it has not been subjected to clinical trial in the United States and we are quite certain that it is not generally available for drug use in this country. An extensive report was published in the June, 1947, issue of the *British Medical Journal* under the title "A New Euphoriant for Depressive Mental States." The author of this paper states that the drug is a powerful euphoriant and is rather more potent than natural Cannabis.

METHOXYCHLOR

Can you give me further information on the new insecticide, methoxychlor, which was mentioned in the January, 1949, issue of the Practical Pharmacy Edition of THE JOURNAL? *I am also interested in the nature of the skin reactions caused by some nail polishes —M. B., New York*

Methoxychlor is a product which has recently been developed by E. I. du Pont de Nemours & Company, Inc., Wilmington, Del., for use as an insecticide in place of DDT. Chemically it is Bis(*p*-methoxyphenyltrichloroethane). For further information concerning this product we suggest that you write to duPont.

We have also noted that you are interested in knowing the nature of the ingredients of nail polishes which have been found to cause unusual skin reactions in a large number of instances. There are two products which have been found to be particularly troublesome. One of these is a synthetic rubber of the acrylonitrile type. Another ingredient of nail polishes which frequently causes skin reactions is a synthetic resin of the phenol formaldehyde type, of which Bakelite is an example.

DUODENUM

Would it be possible to obtain any information concerning a substance, "Duodenum," which has been clinically experimented with at the University of Illinois in ulcer conditions?—M. G., Illinois

This product is supplied by the Viobin Corp., Monticello, Ill. It is supplied only in bulk form intended for manufacturing purposes and only in a raw state. We have been unable to locate a source of dosage forms of Duodenum.

Perhaps a letter of inquiry addressed to the University of Illinois Medical School Chicago, would enable you to obtain information concerning dosage forms. We believe, but we cannot verify this belief, that Duodenum has been used only to a limited extent for experimental purposes.

AMBERLITE AND "RESINAT"

We should like to obtain the addresses of manufacturers of Amberlite IR IV and "resinat."—D. F., Holland

Amberlite is a generic name for a series of phenolformaldehyde ion-exchange resins. These products are manufactured by The Resinous Products and Chemical Co., 222 W. Washington Square, Philadelphia 5, Pa.

We do not find "resinat" listed in any references available to us. We do, however, find Resinox listed as the generic name for different types of adhesive resins which are manufactured by the Monsanto Chemical Co., St. Louis, Mo.

Officers of A. Ph. A. Sections and Affiliated Associations

Listed below are the officers of the A. PH. A. sections and affiliated organizations elected at the Jacksonville Convention in April. A. PH. A. section officers are as follows:

Scientific Section

Chairman—Raymond P. Ahlquist, Augusta, Ga.; First Vice-Chairman—Earl P. Guth, Columbus, Ohio; Second Vice-Chairman—Lloyd M. Parks, Madison, Wis.; Delegate to the House of Delegates—Paul J. Jannke, New Haven, Conn.; Secretary-Treasurer—Ray S. Kelley, Boston, Mass. (elected last year for three years); and Alternate Delegate—R. C. Anderson, Indianapolis, Ind.

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Education and Legislation Section

Chairman—Ralph W. Clark, Lawrence, Kan.; Vice-Chairman—R. V. Robertson, Spokane, Wash.; Secretary—David W. O'Day, Laramie, Wyo.; and Delegate to House of Delegates—Bernard A. Bialk, Tucson, Ariz.

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Historical Pharmacy Section

Chairman—Roland T. Lakey, Detroit, Mich.; Vice-Chairman—H. George Wolfe, New York, N. Y.; Secretary—Glenn Sonnedecker, Madison, Wis.; Delegate to House of Delegates—Kenneth Redman, Athens, Ga.

Officers of affiliated organizations elected during the Convention are:

American Association of Colleges of Pharmacy

President—B. V. Christensen, Columbus, Ohio; President-Elect—Hugo Schaefer, Brooklyn, N. Y.; Vice-President—Tom Rowe, Newark, N. J.; Chairman, Executive Committee—J. B. Burt, Omaha, Neb.; and Secretary-Treasurer—Louis C. Zopf, Iowa City, Iowa.

Dr. John C. Krantz, Jr., of the University of Maryland Medical School, presenting the first Alumni Award of the Alumni Association of the School of Pharmacy of the University of Maryland to Dr. H. A. B. Dunning of Baltimore at the Association's Annual Banquet on June 2. Dr. Dunning, this year's honorary president of the Alumni Association of the Maryland School of Pharmacy, was unanimously selected for the Alumni Award by a committee composed of all past presidents of the Association. A member of the Council of the AMERICAN PHARMACEUTICAL ASSOCIATION *and a Remington medalist, Dr. Dunning is recognized nationally for his work and achievements and for his unselfish efforts in the development of pharmacy as a science and an art.*

National Association of Boards of Pharmacy

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American College of Apothecaries

(Take office September, 1949)

President—R. V. Robertson, Spokane, Wash.; Vice-President—C. J. Masterson, Oklahoma City, Okla.; President-Elect—A. R. Granito, Hackensack, N. J.; and Secretary-Treasurer—Charles V. Selby, Clarksburg, W. Va.

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President—Herbert L. Flack, Philadelphia, Pa.; Vice-President—W. Paul Briggs, Washington, D. C.; Secretary—Gloria Niemeyer, Washington, D. C.; and Treasurer—Sister Mary Junilla, Los Angeles, Calif.

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B_{12} EFFECTIVE IN SPINAL CONDITION

The recently isolated and still hard-to-obtain vitamin B_{12} shows promise of becoming an effective medical weapon against one of the most difficult complications of pernicious anemia, subacute combined degeneration of the spinal cord.

This research report comes from Dr. Tom Spies, professor of nutrition and metabolism, and chairman of the department, in the Northwestern University Medical School. Describing the findings in his studies, he said: "The amount of vitamin B_{12} available is still so small that a complete evaluation of the effectiveness against this condition cannot yet be made, with the result that the study is still under way. But this early report is being made public because the findings seem significant. There is no question about the beneficial effect of B_{12} on subacute combined degeneration of the spinal cord, and no other chemical substance has ever given relief from it."

Dr. Spies selected seven patients for his research, who were chosen because they had previously been studied through several periods of anemia therapy, and their neurological changes observed in detail. In all seven, who had pernicious anemia and early but definite subacute combined degeneration, there followed improvement of symptoms and significant reversal of some of the abnormal physical findings, after injection of 15 micrograms of vitamin B_{12}.

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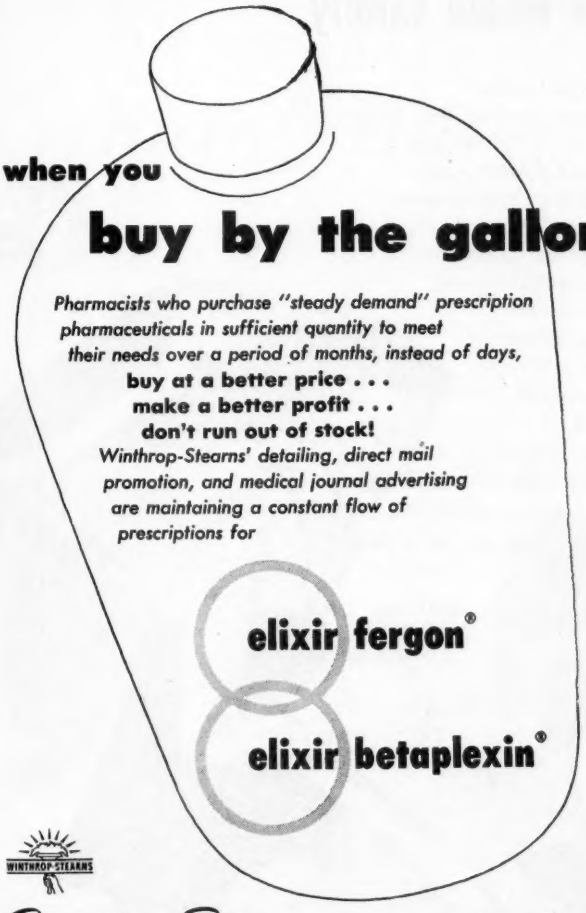

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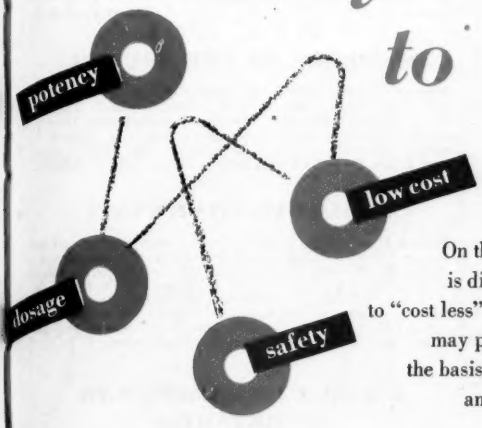

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New prescription products

Product descriptions may be clipped and filed on three- by five-inch cards. These are also indexed for quick reference in the "Monthly Drug Index" appearing on the last page of each issue. A product is described in this column for the information of pharmacists who may be asked by physicians to stock the drug, or who may receive professional inquiries about it. A listing does not imply evaluation or recommendation by the Association, nor does omission of any product have significance concerning its merit.

ALIDASE

Description: Hyaluronidase enzyme in dry state in ampul with sufficient sodium chloride to render isotonic when diluted with 1 cc. distilled water.

Form Supplied: Boxes of 6 and 25 ampuls.

Action: Increases rate of absorption of fluids given subcutaneously including saline, saline in glucose, Ringer's solution, etc.

Administration: 250 viscosity units with the average hypodermoclysis.

Source: G. D. Searle & Co., Chicago 80, Ill.

ALKASPASMOL

Description: Tablets containing aluminum hydroxide gel 250 mg., magnesium trisilicate 250 mg., benzocaine 8 mg., phenobarbital 8 mg., hyoscyamine hydrobromide 0.07 mg., scopolamine hydrobromide 0.02 mg., atropine sulfate 0.02 mg.

Form Supplied: Bottles containing 100 and 1000 tablets.

Action: Hyperacidity, spastic colon, etc.

Administration: 2 tablets every 4 hours.

Source: Walker Vitamin Products, Inc., Mt. Vernon, N. Y.

CHLOROTHEN

Description: Tablets containing 25 mg. N,N-Dimethyl-N′-(2-Pyridyl)-N′-(5-Chloro-2-thenyl)-ethylenediamine citrate.

Form Supplied: Bottles containing 100 tablets.

Action: Antihistaminic providing relief for an average period of 6 hours.

Administration: As indicated.

Source: Whittier Laboratories, Division Nutrition Research Laboratories, Chicago 30, Ill.

C. P. H. (CUTTER PROTEIN HYDROLYSATE)

Description: Sterile solution of amino acids produced by enzymatic hydrolysis of casein.

Form Supplied: 1000-cc. bottles.

Action: Nutrient to replace body protein reserve.

Administration: Intravenously as indicated. Contraindicated in anuria, heart disease, and when intravenous alimentation is inadvisable.

Source: Cutter Laboratories, Berkeley, Calif.

FLOROPRYL

Description: Di-isopropyl fluorophosphate (DFP) 0.1% in peanut oil.

Form Supplied: 5-cc. dropper bottles.

Action: Anticholinesterase for reducing intraocular tension in glaucoma.

Administration: Instillation into the eye as directed by the physician.

Source: Merck & Co., Rahway, N. J.

ORTHOXINE HYDROCHLORIDE, ABERGIC

Description: Tablets containing 100 mg. of beta-(ortho-methoxyphenyl)-isopropyl-methylamine hydrochloride.

Form Supplied: Bottles containing 100 and 500 tablets.

Action: Bronchodilator having minimal pressor effect and effect on central nervous system, also useful as smooth muscle inhibitor.

Administration: For controlling asthmatic attacks 50 to 100 mg. every 3 to 4 hours.

Source: Upjohn Co., Kalamazoo 99, Mich.

PITUITARY GONADOTROPIC FACTOR

Description: True gonadotropic fraction separated from sheep pituitary glands, standardized to contain 300 units per cc. when diluted according to directions.

Form Supplied: Dry lyophilized powder in 10-cc.

(*Continued on Page 392*)

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OWENS-ILLINOIS GLASS COMPANY
TOLEDO 1, OHIO · BRANCHES IN PRINCIPAL CITIES

Duraglas Rx CONTAINERS

NEW PRESCRIPTION PRODUCTS

(Continued from Page 390)

rubber-capped vial with a 10-cc. ampul of sterile water containing 0.5% phenol.

Action: Wherever follicle-stimulating and luteinizing hormones are needed.

Administration: 600 rat units (2 cc.) intramuscularly (preferably gluteal) daily. In children 0.3 to 1 cc.

Source: Armour Laboratories, 1425 West 42nd St., Chicago 9, Ill.

PYRROLAZOTE, ABERGIC TABLETS

Description: 25- and 50-mg. tablets of pyrathiazine.

Form Supplied: Bottles of 100 and 1000 tablets.

Action: Antihistaminic.

Administration: 50 mg. 3 or 4 times daily, preferably after meals and at bedtime.

Source: Upjohn Co., Kalamazoo 99, Mich.

RUBRAMIN

Description: Vitamin B_{12} concentrate containing 15 micrograms per cc.

Form Supplied: Boxes of five 1-cc. ampuls.

Action: Treatment of pernicious anemia.

Administration: According to clinical response.

Source: E. R. Squibb and Sons, 745 Fifth Ave., New York 22, N. Y.

THALINOL

Description: Capsules of phenolphthalein, 300 mg. in oil.

Form Supplied: Bottles containing 30 and 100 capsules.

Action: Laxative.

Administration: One capsule as directed by the physician.

Source: Marvin R. Thompson, Inc., Stamford, Conn.

THENYLENE HYDROCHLORIDE CREAM

Description: A 2% cream of thenylene hydrochloride (methapyrilene hydrochloride) in a water-soluble mixture of polyethylene glycols.

Form Supplied: 1-oz. tubes and 1-lb. jars.

Action: Atopic dermatitis, contact dermatitis, etc., where itching is a prominent feature.

Administration: Apply topically with light massage. Avoid too great absorption by limiting size of area and period of use.

Source: Abbott Laboratories, North Chicago, Ill.

TOBENE OINTMENT

Description: An ointment containing thiourea, orthophenylphenol, and benzocaine in a readily absorbed base.

Form Supplied: One-oz. and 3-oz. jars.

Action: Antipruritic.

Administration: Applied to affected area night and morning.

Source: Goodwin Laboratories, Inc., 90 Prince St., New York 12, N.Y.

TRIPAZINE

Description: Tablets containing 0.167 Gm. each of sulfadiazine, sulfamerazine, and sulfamethazine.

Form Supplied: Bottles containing 100 and 1000 tablets.

Action: Treatment of infections amenable to sulfonamides.

Administration: As determined by the physician.

Source: Eaton Laboratories, Norwich, N. Y.

TROSINONE

Description: Anhydrohydroxyprogesterone in 5- and 10-mg. tablets.

Form Supplied: Bottles containing 20 and 100 tablets.

Action: Used in treating hormone imbalance due to corpus luteum deficiency.

Administration: In dysmenorrhea 5 to 10 mg. daily; in habitual abortion 50 to 75 mg. daily. Contraindicated in bleeding due to mechanical, neoplastic, or inflammatory causes.

Source: Abbott Laboratories, North Chicago, Ill.

VALOCHLORAN

Description: A liquid containing chloralhydrate 0.5 Gm., valerian fluidextract 20 cc., viscum album fluidextract 20 cc., papaverin solution (0.2%) 7.5 cc. strophanthus tincture 1 cc. Valochloran cum Nitro contains in addition nitroglycerin spirit 0.2 cc.

Form Supplied: 50-cc. dropper bottle.

Action: Nerve sedative.

Administration: 20 to 30 drops 3 times daily.

Source: Douglas Chemical Corp., 1624 Darrow Ave., Evanston, Ill.

VITAMIN B_{12} CONCENTRATE

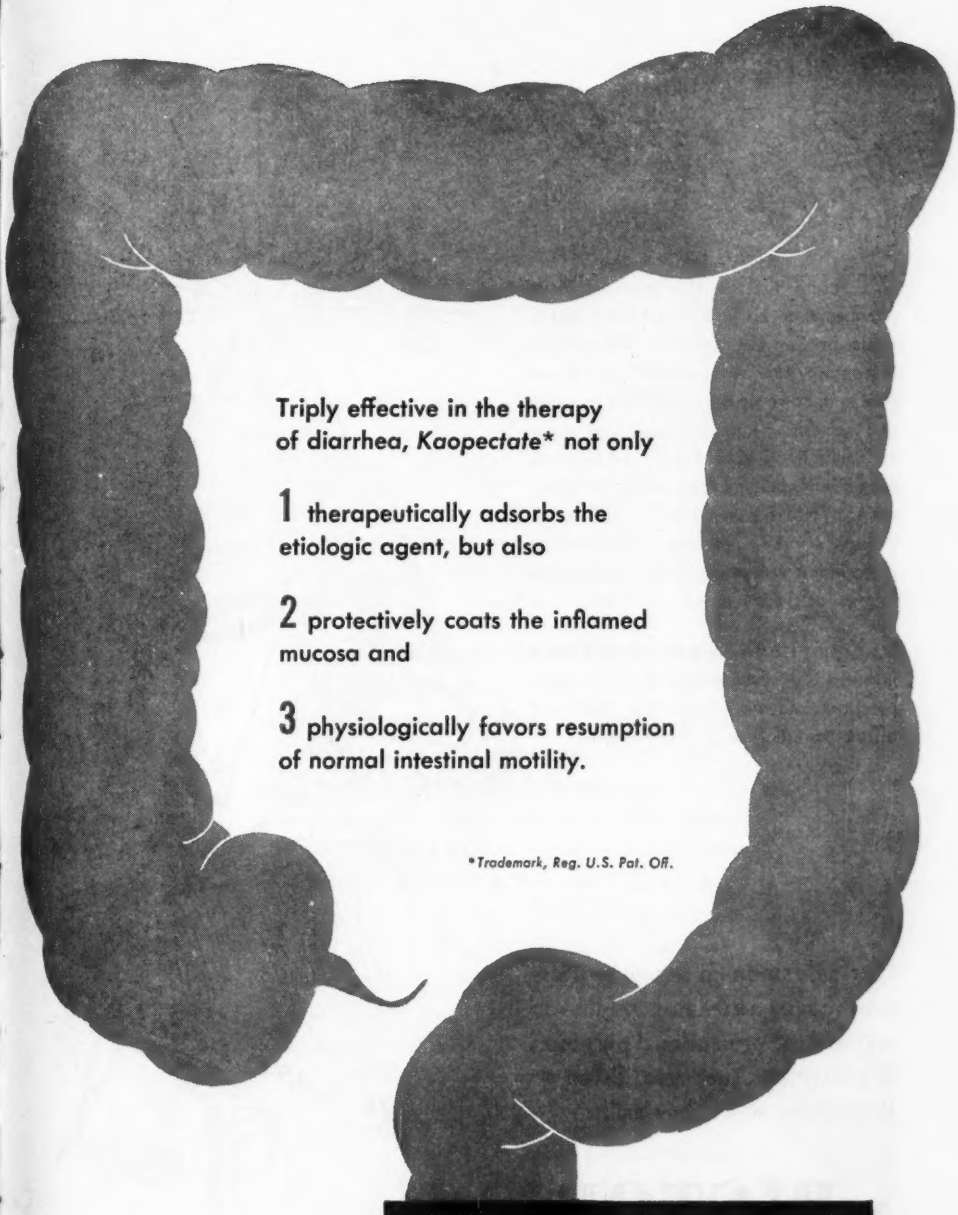
Description: An aqueous solution containing 10 micrograms of vitamin B_{12} per cc.

Form Supplied: 10-cc. rubber-capped vials.

Action: Treatment of pernicious anemia.

Administration: Intramuscularly 10 to 20 micrograms weekly for anemia of pregnancy and macrocytic anemia in infants. In nutritional anemia 6 to 100 micrograms over a 14-day period. In pernicious anemia 25 micrograms per week.

Source: Armour Laboratories, 1425 West 42nd St., Chicago 9, Ill.



Triply effective in the therapy of diarrhea, *Kaopectate** not only

1 therapeutically adsorbs the etiologic agent, but also

2 protectively coats the inflamed mucosa and

3 physiologically favors resumption of normal intestinal motility.

**Trademark, Reg. U.S. Pat. Off.*

KAOPECTATE

Upjohn KALAMAZOO 99, MICHIGAN ★ FINE PHARMACEUTICALS SINCE 1886

Congratulations

WE congratulate the prescription pharmacist on his justly deserved progress made in the last decade. We see no reason why this advancement should not continue, however we would like to point out that during a period of hesitant or reactionary trend, aims toward prescription promotion must be increased and to let up even a little bit would be a mistake. If enough effort is put into promoting the prescription business, progress will continue in spite of these difficult conditions.

We hope that we have contributed just a little to the advancement of prescription practices and we pledge our continued effort toward further improvement.

Our salesmen in every territory now have new and improved material for promotional purposes. We suggest that you listen to their story when they call.

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when drastic purges are proscribed, SIBLIN® is prescribed.

When the physician prescribes SIBLIN for chronic constipation, he is utilizing a pleasant, safe and effective method of treatment that does not depend on drastic purges for its action. SIBLIN contains a granular, hydrophilic substance derived from Plantago, which absorbs large quantities of water in the intestinal tract and mixes intimately with food residues to form a soft, bulky mass of gelatinous consistency. Thiamine hydrochloride (Vitamin B_1), also present in SIBLIN to the extent of 150 international units in each heaping teaspoonful, aids in improving the tone of the intestinal musculature and in enhancing peristaltic function. SIBLIN is smooth and gentle in action, without cramping, griping, or other unpleasant effects—and physicians are prescribing it with increasing frequency.

Available in ¼-pound and 1-pound packages.

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MODERNIZE YOUR PRESCRIPTION DEPARTMENT

All eight sets of Merck "fused-label" chemical bottles are ready for shipment: featuring *dual labels that are part of the glass itself*—moistureproof, dirtproof, virtually immune to scratch marks. There's no premium charged for the "fused-label." Order any or all of these sets; consult your wholesaler or Merck salesman for complete list.

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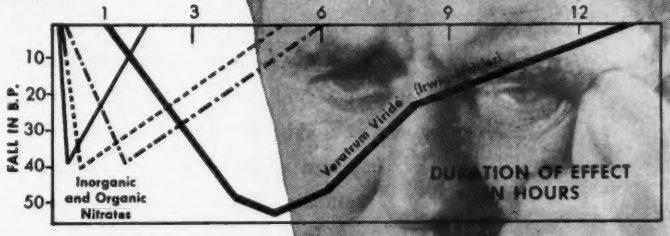
THE DRUG that produces a physiologic fall in blood pressure



veratrum viride in CRAW UNITS*

New hope for the individual with hypertension is assured in recent reports from extensive clinical research:

(1) Veratrum viride (Biologically Standardized in Craw Units) produces the greatest fall in blood pressure in the greatest number of patients.

(2) Veratrum viride in Craw Units produces a fall in blood pressure of far greater duration than any drug previously used.

(3) Veratrum viride in Craw Units, of all the drugs employed today, is the only therapeutic agent which produces a physiologic fall in blood pressure.

Clinical study of this very old drug has been made possible only because a method has now been devised for standardizing veratrum viride by means of CRAW UNITS . . . an Irwin-Neisler research development. In no instance have unstandardized powders, tinctures, fluid extracts or solutions of veratrum viride produced uniform therapeutic effects in hypertension, nor do they have the same pharmacologic action as does the biologically standardized drug in Craw Units. There is, therefore, *no equivalent* between Craw Units and milligrams or grains of unstandardized powdered veratrum viride.

In order to duplicate these striking clinical effects in the treatment of essential hypertension, it is imperative that the physician receive only the Biologically Standardized veratrum viride in Craw Units. Make sure your stocks include adequate supplies of these important Irwin-Neisler specialties:

Vertavis® **Tablets . . . *for severe, resistant essential hypertension.*** A single agent containing whole-powdered veratrum viride, Biologically Standardized. Supplied in 10 Craw Unit or 5 Craw Unit potencies. VERTAVIS® with Phenobarbital is also available.

Veratrite® **Tabules . . . *for mild and moderate essential hypertension.*** An effective combination of veratrum viride 3 Craw Units, sodium nitrite 1 grain, and phenobarbital ¼ grain.

*The CRAW UNIT is the multiple of the amount of veratrum viride which will cause cardiac arrest in the test animal, Daphnia Magna. *Literature on the CRAW UNIT available on request.*

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Co-operative effort in the common interest
is the basis of all growth, whether it be in international affairs
or business life. The day of "play it alone" is past.
The health professions are working closer together than ever before.
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naturally follow to the benefit of the patient.
In complete co-operation with the trend
is the Lilly Medical Service Representative.
At every opportunity he encourages respect
for the function of the physician who prescribes
and the pharmacist who compounds.
A courier of factual information, a disseminator of scientific data,
the Lilly Medical Service Representative
is indeed a man of co-operation.

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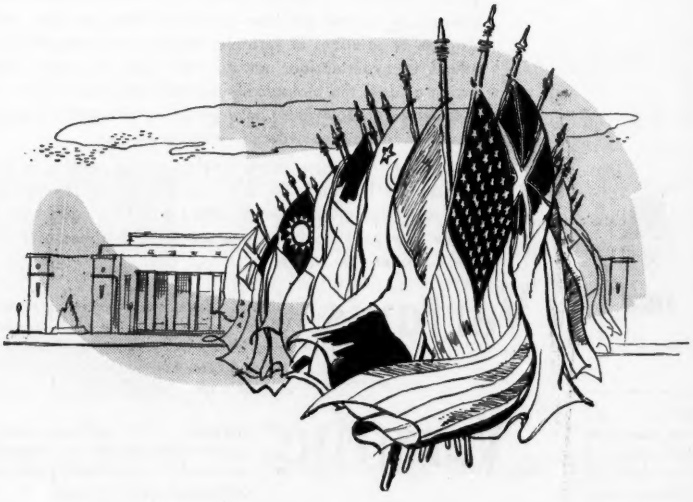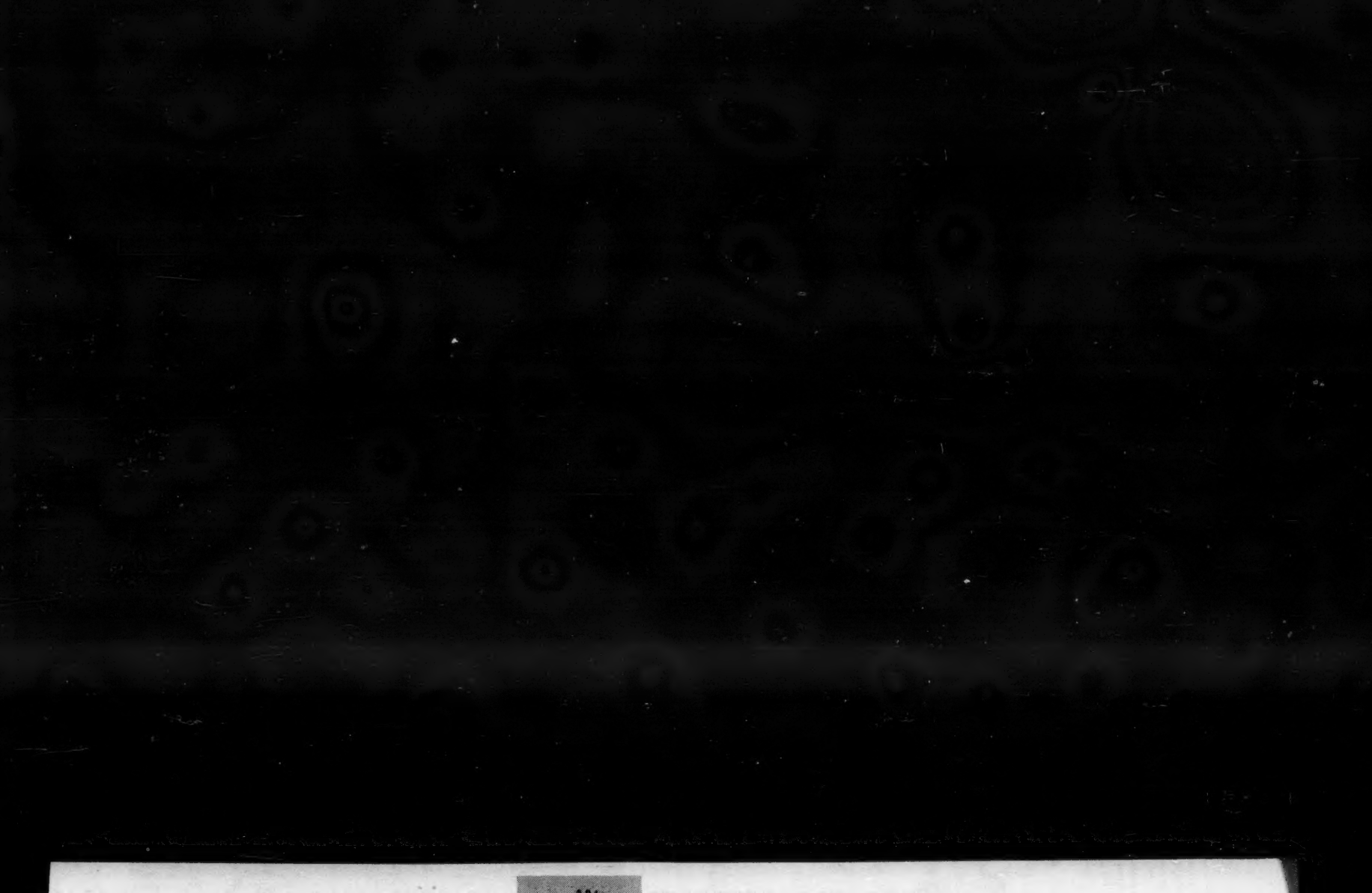
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